

EXHIBIT 2

to

PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

in

*Center for Biological Diversity and Amargosa
Conservancy v. Debra Haaland, et al.*

Case No. 2:21-cv-01049-JAD-NJK

Declaration of Patrick Donnelly

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Attorneys for Plaintiffs

**UNITED STATES DISTRICT COURT
DISTRICT OF NEVADA**

CENTER FOR BIOLOGICAL DIVERSITY
and AMARGOSA CONSERVANCY,

Plaintiffs,

vs.

DEBRA HAALAND in her official capacity
as Secretary of the Interior, TRACY STONE-
MANNING in her official capacity as the
Director of the Bureau of Land Management,
U.S DEPARTMENT OF THE INTERIOR,
BUREAU OF LAND MANAGEMENT, and
NICHOLAS B. PAY in his official capacity
as Field Manager of the Bureau of Land
Management Pahrump Field Office,

Defendants.

Case No: 2:23-cv-1049-JAD-NJK

**DECLARATION OF PATRICK
DONNELLY**

1 I, Patrick Donnelly, hereby declare as follows:

2 1. I have personal knowledge of the facts set forth in this declaration. If called as a
3 witness, I could and would competently testify to these facts. As to matters that reflect an opinion,
4 they reflect my personal opinion and judgment on the matter.

5 2. I live in Shoshone, California. I have a Bachelor of Science in Conservation and
6 Resource Studies from the University of California, Berkeley. Desert ecosystems were my
7 particular area of interest. I have been a conservation biologist in the California and Nevada deserts
8 for 19 years, including 5 years full time in the field. I have designed, implemented, and supervised
9 numerous habitat restoration projects, using techniques to restore and enhance plant communities
10 to support native ecosystem function. I have regularly conducted surveys for rare and endangered
11 species for 9 years. Desert ecology is my passion.

12 3. I first became a member of the Center for Biological Diversity (the Center) in 2006.
13 Since 2017 I have been employed at the Center, first as Nevada Wildlife Advocate, then the
14 Center's Nevada State Director, and finally my current role as Great Basin Director. My role is to
15 advocate for the protection of wildlife, public lands, and groundwater of the Great Basin. As part
16 of that role, I monitor government action involving public lands and endangered species in Nevada.
17 I use the Freedom of Information Act and other tools to understand how resources are being
18 managed by land management, wildlife management, and resource management agencies, and
19 provide comments on documents prepared under the National Environmental Policy Act (NEPA),
20 on administrative proceedings before state agencies, and in preparation for litigation.

21 4. The Center is a tax-exempt, non-profit, membership organization with thousands
22 of members and supporters, including 666 members in Nevada. The Center's main office is in
23 Tucson, Arizona. The Center works through science, law, and creative media to secure a future for
24 all species, great or small, hovering on the brink of extinction. The Center has an extensive history
25 of working to protect ecosystems, species, water, and climate from groundwater overappropriation.

26 5. The Center has several programs in place to address the many components of its
27 advocacy, including ones for Endangered Species, Oceans, Climate Law, Environmental Health,

1 and Public Lands. At the Center, we believe that the health and vigor of human societies and the
2 integrity and wildness of the natural environment are closely linked. Beyond their extraordinary
3 intrinsic value, animals and plants, in their distinctness and variety, offer irreplaceable emotional,
4 spiritual, and physical benefits to our lives and play an integral part in culture. Their loss, which
5 parallels the loss of diversity within and among human civilizations, impoverishes us beyond
6 repair.

7 6. As part of its mission, the Center provides oversight of governmental activities that
8 impact all species and their habitats, as well as on human health and wellbeing more generally.
9 The Center has been at the forefront of efforts to hold the government accountable for its
10 obligations under the Endangered Species Act, and engages in protection efforts and campaigns to
11 ensure that our nation's environmental laws—including NEPA and the Endangered Species Act—
12 are enforced with respect to imperiled wildlife and habitat, air and water quality, and human health,
13 especially on our public lands.

14 7. The Center also actively develops and disseminates—to its members,
15 policymakers, governmental officials, non-profit organizations, and interested members of the
16 general public—a wide array of educational and informational materials concerning the status of
17 and threats to biodiversity, air and water quality, and federal public lands. For example, we have
18 numerous webpages related to endangered species and have implemented numerous letter
19 submission “action alerts” to our membership on various endangered species issues, so they can
20 easily provide public comments to the policy makers on issues that are open for comment.

21 8. The Center's members' diverse interests span natural history, ecology,
22 conservation, wildlife and native plant observation, nature photography, hiking, camping,
23 backpacking, quiet and solitude in nature, dark skies, spiritual renewal, and a love of the Great
24 Basin's natural landscapes. Center members, including myself, derive benefit from engaging with
25 landscapes and the endangered species that reside there. The Center's members expect and rely
26 upon federal and state regulatory agencies, such as the Bureau of Land Management, to protect the
27 species, habitats, viewsheds, and air and water quality of these lands.

1 9. In addition to the Center’s interests in Nevada’s endangered species, I have strong
2 personal and professional interests in such species and their habitats.

3 10. The Amargosa Basin is a groundwatershed surrounding the Amargosa River,
4 spanning Nye and Clark Counties in Nevada, and Inyo and San Bernardino Counties in California.
5 Its centerpiece is the enigmatic Amargosa River, a so-called “hide and seek river,” which bursts to
6 life at spring-fed oases along its course. The most significant of these oases is the collection of
7 springs and wetlands at Ash Meadows National Wildlife Refuge in Amargosa Valley, Nevada.

8 11. The Amargosa Basin also contains vast areas of creosote (*Larrea tridentata*)
9 shrublands and mesquite (*Prosopis pubescens* and *P. glandulosa*) woodlands, which provide
10 habitat for a wide variety of desert species and demonstrate that even areas considered inhospitable
11 by most humans contain remarkable, thriving ecological communities.

12 12. I have lived in the Amargosa Basin for 9 years. I regularly recreate and seek
13 spiritual renewal on public lands and federally protected areas in Nevada, including at Ash
14 Meadows and in the surrounding uplands. I also have a strong professional interest in the integrity
15 of these lands and the habitats they provide for endangered and threatened species. Because of
16 this, I’m deeply concerned about threats to Ash Meadows National Wildlife Refuge and the 25
17 endemic or near-endemic species which live there. These species and this landscape are direly
18 threatened by lithium exploration as proposed by Rover Metals. If the Rover Metals project moves
19 forward, it will cause irreparable harm to lands and waters in and around Ash Meadows and
20 possibly drive these species toward extinction.

21 13. I love the desert. I’ve spent my life chasing the questions the desert poses, and the
22 few elusive answers it provides. Exploring the desert, including my home in the Amargosa Basin
23 and the Project area, is continually rewarding. The learning is constant, and each day exploring
24 brings about novel observations and insights into the ecosystem, biogeography, and climate.

25 14. Rare and endemic species like the twenty-five endemic or near-endemic species of
26 Ash Meadows are among my chief interests while enjoying Nevada’s public lands. Endemic
27 species are part of what makes the Amargosa Basin so unique—over 60 species occur here and

1 nowhere else on Earth. They are almost all associated with water, and thus their health and vitality
2 frequently reflects the health and vitality of the groundwater-dependent ecosystems they live in.
3 Which in turn support hundreds of species of flora and fauna that need groundwater to survive.

4 15. Endemism is perhaps my favorite facet of biology—endemic species are those
5 which live in one place and nowhere else on Earth. Endemic species are a big reason that I love
6 desert springs so much, since they tend to be hotbeds of endemism as aquatic species (like toads,
7 fishes, springsnails, or phreatophytic vegetation) found there are frequently separated from their
8 nearest relatives by dozens of miles of open, dry desert. It has been many millennia since Southern
9 Nevada’s deserts had long interconnected waterways. Over that time period, these isolated
10 populations of species have developed unique adaptations to their specific environments and
11 characteristics that only they possess, to the point that they become so differentiated that biologists
12 regard them as discrete species. I believe in endemic species we truly understand the nature of the
13 desert—their adaptations to their specific environment provide a lesson for all of us on how we
14 can thrive in the harshest of conditions if we simply learn how to adapt our ways of being to what
15 resources we have. Endemic species are the thing in the desert that brings me the most joy and
16 draw me in for exploration, contemplation, and photography.

17 16. Ash Meadows is a vibrant area of abundant springs, wet meadows, groundwater
18 dependent mesquite groves, creosote shrublands, and alkali flats along the Amargosa River in the
19 Death Valley ecoregion of southwestern Nevada and eastern California. The springs of Ash
20 Meadows are sourced from a deep carbonate aquifer, and emerge at the surface with a combined
21 discharge of 17,000 acre-feet per year across dozens of springs. Because of this abundance of
22 water, and the relative hydrologic isolation of spring systems, Ash Meadows is a hotbed for
23 biodiversity. 25 species are found there and nowhere else on Earth.

24 17. Notable among these 25 species are the twelve species which are protected under
25 the Endangered Species Act: four fishes, one insect, and seven plants. These organisms are
26 unevenly distributed across the Refuge, with the fishes predominantly located at springheads and
27 in the springbrooks immediately downstream, while the plants are primarily located in wet

1 meadows and alkali flats. All twelve of these organisms are aquatic and rely on sustained discharge
2 of groundwater from the springs at Ash Meadows for their survival. If the springs were to go dry
3 or appreciably change in discharge, these species would likely go extinct.

4 18. The northernmost spring in the Refuge is Fairbanks Spring. Fairbanks Spring is a
5 beautiful cerulean blue spring discharging hundreds of gallons per minute of crystalline water. It
6 is home to the Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*), the Ash
7 Meadows speckled dace (*Rhinichthys osculus nevadensis*), and the Fairbanks Spring springsnail
8 (*Pyrgulopsis fairbankensis*). It forms the northernmost point of discharge for a surface and
9 groundwater flow system called Carson Slough, which spans Ash Meadows from north to south
10 before continuing on BLM-managed public lands across the state line into California. Carson
11 Slough provides habitat for many of the 25 endemic species which occur at Ash Meadows. The
12 integrity of Fairbanks Spring and the groundwater discharge there is essential for the conservation
13 of Ash Meadows and its endemic, federally listed inhabitants.

14 19. Research has shown that the spring discharge at Ash Meadows is threatened by
15 overexploitation of groundwater in the Amargosa Basin. In particular, pumping from a dairy and
16 alfalfa growing operation across the highway from Ash Meadows poses a significant threat to the
17 species there, with models showing long-term declines in groundwater levels if current pumping
18 continues.

19 20. Rover Metals has proposed a mineral exploration project to drill up to 30 boreholes
20 on public lands just north of Ash Meadows National Wildlife Refuge. They are planning to drill
21 these holes 250-300 feet deep, and they expect all of the boreholes to intersect groundwater. The
22 closest of these boreholes are just a few hundred feet away from the boundary of Ash Meadows,
23 and one proposed borehole would be within 2,000 feet of Fairbanks Spring, one of the most
24 significant springs in the Refuge.

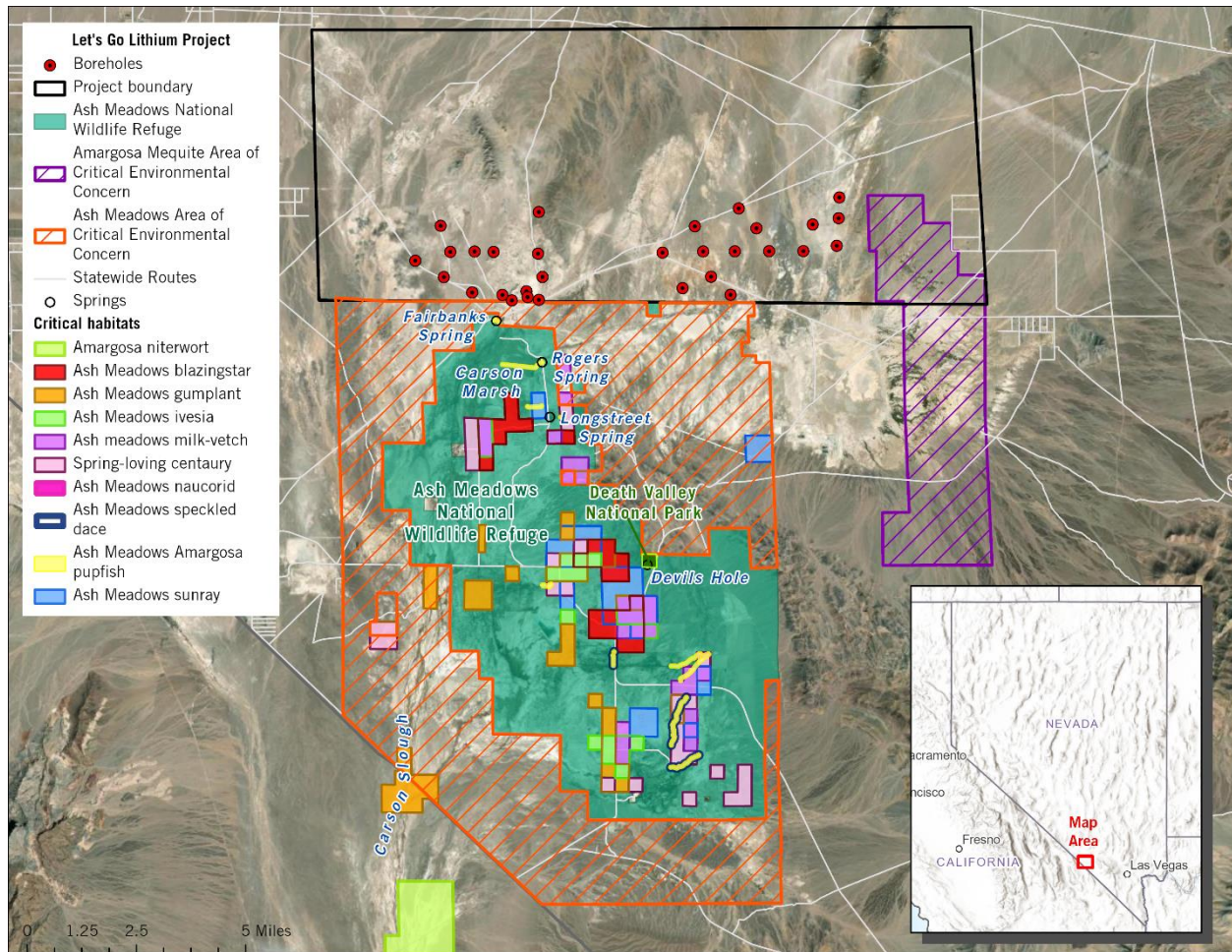


Figure 1: Map of Ash Meadows and the Let's Go Lithium Project

21. Down the river from Ash Meadows, in Tecopa, California, is a hot spring called Borehole Spring. It is so called because in the 1960s, the Stauffer Chemical Company sunk a well there and hit uncontrolled artesian flow. They tried to plug the hole with gravel and cement and other techniques, but they were unable to stop the flow. It continues to flow to this day, and is known as The Borehole. The constant discharge of water from The Borehole has reshaped the groundwater hydrology of the Tecopa area, causing some springs to dry up, per research by hydrologist Andy Zdon. This is just one way that drilling boreholes in the middle of a sensitive groundwater system could cause perturbations to the surface discharge of that system.

22. Rover Metals' proposed exploration project, by their own admission, will intersect groundwater. If their drilling activities cause a perturbation to the groundwater flow system, or

1 worse, hit uncontrolled artesian flow, that would affect down-gradient springs such as Fairbanks
2 Spring, Carson Slough, or other springs on the Refuge.

3 23. If Rover Metals caused Fairbanks Spring to go dry, or substantially altered its flow,
4 temperature, or chemistry it would harm rare species protected under the Endangered Species Act
5 and could potentially lead to their extinction. If springflow at Fairbanks Spring were to decrease,
6 it would also affect downstream resources along Carson Slough, including endangered species
7 habitat. Impacts to groundwater discharge in Ash Meadows and the species that depend on it from
8 Rover's project would constitute irreparable damage to Ash Meadows National Wildlife Refuge.

9 24. In addition, Rover's proposed drilling would irreparably harm creosote shrublands
10 and mesquite groves in the Project area adjacent to Ash Meadows National Wildlife Refuge, which
11 I value for their undisturbed natural character and the solitude they provide as part of the Mojave
12 Desert landscape. Seeing these lands disturbed, de-vegetated, and industrialized by heavy
13 equipment, vehicles, and well-drilling rigs would forever harm my experience of visiting Ash
14 Meadows and exploring the desert landscapes in the Amargosa Basin.

15 25. I have primarily lived in the Amargosa Basin since 2014. From 2014-2016, I lived
16 in the yellow house in Shoshone, California. From 2016-2017, I lived in a 1956 travel trailer in
17 Tecopa Heights, California. From 2018-2021, I lived in a home that I owned in Pahrump, Nevada.
18 And since 2021, I have lived in the Dublin neighborhood of Shoshone, California.

19 26. I love living in the Amargosa Basin. It is as important to me as anything in my life.
20 I wake up every morning to watch the sunrise over the beautiful Amargosa River. I hike every day
21 among the rocks and plants, dodging snakes and listening to birdsong. I track the climate and
22 rainfall, predict the bloom of wildflowers, hunt down rare populations of imperiled species, visit
23 secret spots only known to me. I have boated down the Amargosa River in a flash flood; I have
24 watched the dirt cake and crack in the drought. I have had the opportunity to move away three
25 times, and each time I have returned. It isn't just my home, it's the love of my life.

26 27. I have visited Ash Meadows more times than I can count. Some of the times I have
27 visited which I have photographic evidence for include: November 23, 2014; October 4, 2016;

December 5, 2019; January 1, 2020; February 16, 2020; April 25, 2020; May 31, 2020; June 1, 2020; June 7, 2020; June 26, 2020; March 17, 2021; May 8, 2021; May 31, 2021; August 4, 2021; December 8, 2021; April 23, 2022; May 29, 2022; July 29, 2022; July 30, 2022; August 6, 2022; March 7, 2023; May 28, 2023; June 1, 2023; June 25, 2023. Most of these visits would revolve around visiting one or more of the springs at Ash Meadows and walking around the marshes and wetlands nearby observing and photographing rare plants and fishes.

28. On many of my visits to Ash Meadows, I have visited Fairbanks Spring in order to observe the endangered species habitat there. I have seen Ash Meadows Amargosa pupfish schooling in the crystalline waters of Fairbanks Spring, during the heat of summer. I have felt the warm thermal water discharge on a frosty morning in winter. I have sat by the banks of the spring pool and contemplated the meaning of life and the desert.



Figure 2: Fairbanks Spring. Photo taken August 6, 2022.

29. I have specific, concrete plans to revisit Ash Meadows, Fairbanks Spring and the Project area, including later this Summer. Ash Meadows is just 40 miles up the Amargosa River from my house, and I visit at least a half dozen times a year, sometimes more, in order to view the

1 species and habitats there. I enjoy going in the middle of summer and into the autumn when the
2 rare plants are at their peak bloom. I also enjoy visiting in spring during the green-up, as the
3 wetlands and surrounding desert spring to life after their winter slumber. I will continue visiting
4 Ash Meadows and the surrounding areas for as long as I live.



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16 **Figure 3: An endangered Ash Meadows Amargosa pupfish at Fairbanks Spring. Photo taken**
17 **June 7, 2020.**

18 30. I first learned of the Rover Metals project on December 1, 2022, through a Google
19 alert I have set up for “Nevada lithium.” I maintain a database of all of the lithium projects in
20 Nevada, so the Rover project came across my desk as a part of that work. At that time I set up a
21 “rover metals” Google alert, and I now receive alerts daily each time those keywords appear on
22 the internet. Through this research, I’ve been able to track the progress of the Rover Metals project,
23 including when they submitted their drilling notice to BLM and when they stated their intention to
24 drill this summer.

25 31. Through communications with BLM about Rover’s project I learned that Rover
26 first submitted a “notice of intent” to BLM on January 20, 2023. After discussions with BLM,
27 Rover submitted a revised NOI on March 22, 2023. BLM informed me that it “accepted” Rover’s

1 revised notice on April 5, 2023. **Attachment 1** is a true and correct copy my email exchange with
2 Mr. Nicholas Pay, Field Manager for the BLM Pahrump Field Office, regarding this process. In
3 this exchange, Mr. Pay states that a BLM botanist inspected the immediate area of the proposed
4 drilling pads for threatened and endangered plants, but does not state or otherwise indicate that
5 BLM considered the potential for impacts to the groundwater resources and ecosystems that
6 support threatened and endangered species at the Refuge.

7 32. On May 18, 2023, after I inquired about the status of the Project on behalf of the
8 Center, BLM responded via email, stating, in part: “On April 5th, 2023, the BLM accepted the
9 updated Notice of Intent from Rover Metals, with a bond of \$30,003.00. Rover has not submitted
10 the bond and therefor they are not currently authorized to begin work.” See **Attachment 1**.

11 33. On May 23, 2023, the Center submitted a letter to Mr. Pay expressing our concerns
12 about the Rover Metals project and outlining the ways in which the planned mineral exploration
13 project would violate the law. **Attachment 2** is a true and correct copy of this letter. On May 26,
14 2023, the Center submitted a notice of intent to sue to Mr. Pay, BLM Director Tracy Stone-
15 Manning, and Secretary of the Interior Debra Haaland due to these same concerns. **Attachment 3**
16 is a true and correct copy of the Center’s notice To date, we have not received any reply to our
17 missives.

18 34. On June 28, 2023, I inquired again about the status of the Project on behalf of the
19 Center. BLM responded on June 30, 2023, stating:

20 Rover Metals is actively working with the Nevada State Office to get their Financial
21 Guarantee in place in accordance with the regulations found in 43 CFR 3809. Once
22 that financial guarantee has been adjudicated by the team at the State Office they
23 will send out an acceptance letter to the operator. Once the financial guarantee has
24 been accepted then the operator is able to carry out the work identified in their
25 notice consistent with the Mining Law of 1872 (30 U.S.C. 22 et seq.) and the
26 implementing regulations found in 43 CFR 3809.

27 A true and correct copy of this email message is attached as **Attachment 4**.

35. On July 3, 2023, I received an email forwarded to me from Kevin Emmerich,
cofounder of Basin and Range Watch. In the email, Glenn Knowles, Field Supervisor for the U.S.

1 Fish and Wildlife Service in Nevada, states, in reference to Rover’s proposal, “We have not been
2 contacted or consulted with about anything like the project you describe.” **Attachment 5** is a true
3 and correct copy of this email.

4 36. On July 3, 2023, I received an email forwarded to me by Kevin DesRoberts of the
5 U.S. Fish and Wildlife Service. Mr. DesRoberts manages the Desert Refuges Complex which
6 includes Ash Meadows National Wildlife Refuge. In it, he expresses concern to his colleague about
7 a myriad of threats facing Ash Meadows including the Rover Metals project. **Attachment 6** is true
8 and correct copy of Mr. DesRoberts’s July 3, 2023 email.

9 37. Without a thorough environmental review, ESA consultation, and formal approval
10 process subject to the “unnecessary and undue degradation standard” as required under the ESA,
11 NEPA, and BLM’s mining regulations, Rover Metals’ mineral exploration project threatens
12 imminent and irreparable harm to Ash Meadows National Wildlife Refuge and threatens the 25
13 endemic and near-endemic species which live there with extinction. BLM has failed to protect
14 these places and species from irreparable harm by unlawfully treating Rover’s project as a “Notice”
15 operation and failing to consult with the U.S. Fish and Wildlife Service as required under the ESA.

16 38. My aesthetic, recreational, scientific, and spiritual interests in the species and
17 ecosystems of the Amargosa Basin, including the Project area, Ash Meadows National Wildlife
18 Refuge, and the 25 endemic or near-endemic species which live there will be irreparably harmed
19 by Rover’s proposed drilling, which would disturb, industrialize and permanently alter a unique
20 desert landscape within one of the most unique ecosystems in the world—a place I value
21 specifically for its natural character and solitude. My interests in Ash Meadows and the endemic
22 species there will also be irreparably harmed if the BLM fails to require consultation and
23 environmental review on Rover Metals project. If Fairbanks Spring or the threatened and
24 endangered species at Ash Meadows were to be adversely impacted by Rover’s project, it would
25 be a crushing blow to me and would cause long term harm to my happiness and ability to derive
26 benefit from the public lands of Nevada and from my home in the Amargosa Basin.

27 39. The relief sought by plaintiffs, including the Center, in this action will remedy my

1 injury, as well as the Center's and its members' injuries, by enjoining Rover's operations for the
2 pendency of this litigation, vacating BLM's approval of Rover's NOI, and requiring ESA
3 consultation, NEPA analysis, and BLM approval or any exploration activities subject to FLPMA's
4 "unnecessary and undue degradation" standard. A ruling from this Court enjoining the proposed
5 drilling, vacating BLM's approval, and requiring BLM to follow the proper procedures laid out in
6 its governing laws and regulations will prevent irreparable harm to desert ecosystems and
7 landscapes in the Amargosa Basin, Ash Meadows National Wildlife Refuge, the groundwater-
8 dependent springs and ecosystems in the Refuge, and all of the endemic, threatened, and
9 endangered species that live there.

10 40. I submit the following points as evidence of the Center for Biological Diversity's
11 inability to post a substantial bond in this case.

12 41. The Center is a 501(c)(3) non-profit conservation organization.

13 42. The Center's funding comes primarily from charitable contributions and grants
14 from private foundations.

15 43. The Center brings public-interest lawsuits under citizen suit and other judicial
16 review provisions created by Congress to allow organizations such as ours to seek enforcement of
17 environmental laws. The Center has no personal or financial stake in the litigation we pursue. The
18 Center's lawsuits such as this one are brought to benefit the public as a whole and are aimed at
19 vindicating public rights.

20 44. Through litigation we seek to protect endangered species and public lands and
21 waters in the public's interest, and to enforce provisions of the National Environmental Policy Act,
22 the Endangered Species Act, and other environmental laws. We are often compelled in these cases
23 to seek a preliminary injunction or an injunction pending appeal. If the Center is required to pay a
24 substantial bond each time that we seek injunctive relief, it would curtail our ability to achieve our
25 mission.

26 45. Financial operations of an organization like the Center are very different from a
27 for-profit corporation because much of the money we receive from foundations and individuals

1 through grants and contributions is legally encumbered. This is money we receive to perform a
2 specific action. It is not money that is available to spend as we please.

3 46. Because so much of the money we receive is allocated to a particular activity, we
4 rely on our general funds and donations of individuals to fund our general operating expenses.
5 These general operating expenses cover much of our conservation work and all administrative
6 functions, including administrative and executive staff salaries, rent, equipment purchase,
7 maintenance and repair, and any other overhead expenses of the Center. The Center has allocated
8 all of its general funds to meet the requirements of our annual budget and currently does not have
9 any of these general funds in reserve. Right now, payment of a substantial bond in this case would
10 require eliminating one or more administrative staff positions at the Center to acquire any general
11 funds for this purpose.

12 47. The fact of the matter is, we simply do not have money available to pay a substantial
13 bond in this case. The Center is run very differently from a for-profit organization. We do not
14 make money and then disburse it to owners or shareholders; rather, we spend what we receive, and
15 what we receive is almost always allocated to a specific purpose, such as litigation with regard to
16 a specific issue and/or region, or the preparation and submission of petitions to list species as
17 endangered and threatened under the federal Endangered Species Act, or public education
18 campaigns. There is no “profit margin” that results in excess funds. There simply are no profits to
19 disburse or to save for the future in a non-profit corporation.

20 48. Therefore, an order requiring the Center to pay a substantial bond would have a
21 chilling effect on the ability of the Center to bring lawsuits to advance the public interest.

22 49. Pursuant to 28 U.S.C. 1746, I declare under penalty of perjury that the foregoing is
23 true and correct to the best of my personal knowledge.
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2 DATED: July 17, 2023
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6 PATRICK DONNELLY
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Attachment 1 to the Declaration of Patrick Donnelly
Email Exchange with Nicholas B. Pay, BLM (May 18, 2023)

Scott Lake

From: Patrick Donnelly
Sent: Thursday, May 18, 2023 4:17 PM
To: Scott Lake
Subject: Fwd: Rover Metals Mining Notice

Patrick Donnelly
Great Basin director
Center for Biological Diversity
775.990.9332
pdonnelly@biologicaldiversity.org

From: Pay, Nicholas B <npay@blm.gov>
Sent: Thursday, May 18, 2023 4:12:59 PM
To: Patrick Donnelly <PDonnelly@biologicaldiversity.org>
Subject: Rover Metals Mining Notice

Patrick,

Thanks for your call about the Rover Metals Mining Notice near Ash Meadows. I hope this email provides you with the details you needed regarding the notice that we have received and provide some background information on the BLM regulations for notice-level mining operations.

On January 20th, 2023, Rover Metals (USA) Inc. Filed a notice of intent for the Ash Meadows area. After review the BLM determined that a site visit was needed. We went out and found that the GPS points were wrong and we requested that they resubmit and flag off drill pad sites and overland travel locations. After flagging the sites we determined that two sites were inside the ACEC and therefore could not be processed under a Notice. Rover Metals removed those sites and relocated two sites to minimize disturbance. They also changed constructed roads to overland travel. During our review our district botanist, one of our biologists, and our Seeds of Success interns went out to the site to look for threatened and endangered species but none were found.

On March 25th, Rover Metals resubmitted the notice with the required corrections. On April 5th, 2023, the BLM accepted the updated Notice of Intent from Rover Metals, with a bond of \$30,003.00. Rover has not submitted the bond and therefore they are not currently authorized to begin work.

I realize that you have a good deal of experience with the regulations regarding notices but I am going to share it anyway.

Operators are required to submit a mining notice in accordance with 43 CFR 3809.21 which states that the notice must be submitted 15 calendar days before you commence exploration causing surface disturbance of 5 acres or less of public lands. The operations under notices are governed in accordance with 43 CFR 3809.300 et. seq. Please keep in mind that notice level operations do not require Federal approval, and therefore are not subject to the National Environmental Policy Act. The BLM review and acceptance of a Notice is part of our enforcement program to ensure that operators comply with their legal responsibility to avoid any unnecessary or undue degradation. (43 CFR 3809.311)

I do want to assure you all that I do understand the implications of this and the significant impacts that could occur if plan level operations are proposed. Our team is monitoring this situation and we will keep you informed as we move forward.

Please feel free to reach out to me if you have any additional questions about this.

For background information BLM classifies mining operations into 3 categories: Casual Use, Notice-level Operations, and Plan-level Operations. I have included the definitions for these operations copied directly from 43 CFR 3809.10

§ 3809.10 How does BLM classify operations?

BLM classifies operations as—

- (a) Casual use, for which an operator need not notify BLM. (You must reclaim any casual-use disturbance that you create. If your operations do not qualify as casual use, you must submit a notice or plan of operations, whichever is applicable. See §§ 3809.11 and 3809.21.);*
- (b) Notice-level operations, for which an operator must submit a notice (except for certain suction-dredging operations covered by § 3809.31(b)); and*
- (c) Plan-level operations, for which an operator must submit a plan of operations and obtain BLM's approval.*

Sincerely,

Nicholas B. Pay

Field Manager
npay@blm.gov
(702) 515-5042 (Desk)
(702) 250-0864 (Cell)

Pahrump Field Office, Southern Nevada District
Bureau of Land Management
Region 10 (California-Great Basin), Department of the Interior
4701 N Torrey Pines Drive
Las Vegas, NV 89130

*Learn from the Past,
Prepare for the Future,
BE Present, and
Find JOY in Life.*

Attachment 2 to the Declaration of Patrick Donnelly

Letter from the Center for Biological Diversity to Nicholas B. Pay, BLM, Re: “Let’s Go Lithium” Exploration Project (May 23, 2023)



May 23, 2023

Nicholas B. Pay
Field Manager
Bureau of Land Management
Pahrump Field Office
4701 N Torrey Pines Drive
Las Vegas, NV 89130
npay@blm.gov

Dear Mr. Pay:

I write on behalf of the Center for Biological Diversity (“Center”), a national nonprofit conservation organization with over 1.7 million members and supporters throughout Nevada and the United States. The Center’s Great Basin program focuses on the protection of wildlife and endangered species, the preservation of public lands, and the sustainability of groundwater resources. Because of this mission, the Center has longstanding interests in protecting groundwater-dependent species and ecosystems within the Ash Meadows National Wildlife Refuge (“Refuge”) and along the Amargosa River.

The Center recently became aware of an exploration notice, filed pursuant to 43 C.F.R. § 3809.21, by Rover Metals, Inc. (“Rover”), as a part of their “Let’s Go Lithium Project,” (“Project”). The notice proposes up to 30 drilling sites in close proximity to the Refuge and Fairbanks Spring, a spring within the Refuge with high biodiversity conservation value that provides habitat for two federally listed fishes. According to the notice, all drill holes are expected to encounter groundwater. Consequently, this exploration operation may impact groundwater-dependent ecosystems and species, including several species listed under the Endangered Species Act (“ESA”), and does not qualify as a “notice-level” operation under 43 C.F.R. § 3809.11 or § 3809.21. In addition, BLM must consult with the U.S. Fish and Wildlife Service pursuant to Section 7 of the ESA before authorizing the proposed exploration activities in order to ensure that they will not jeopardize the continued existence of any endangered or threatened species.

Allowing the Project to go forward under a notice and without the appropriate level of Section 7 consultation would be unlawful and grounds for legal action, as it would violate both BLM’s mining regulations and the ESA. The Center requests that BLM reject the Project as a notice-level operation under 43 C.F.R. § 3809.313, and require Rover Metals, Inc. to submit a plan of operations as required under 43 C.F.R. § 3809.11 or § 3809.21. Any plan of operations submitted must be rigorously analyzed under both Section 7 and the National Environmental Policy Act (“NEPA”).

The Proposed Exploration Does Not Quality as a “Notice-Level” Operation Under 43 C.F.R. § 3809.11 or § 3809.21.

BLM regulations governing the surface management of mining claims recognize three types of operations on mining claims: “[c]asual use, for which an operator need not notify BLM”; “[n]otice-level operations, for which an operator must submit a notice”; and “[p]lan-level operations, for which an operator must submit a plan of operations and obtain BLM’s approval.” 43 C.F.R. § 3809.10. Notice-level operations consist of “exploration causing surface disturbance of five acres or less of public lands on which reclamation has not been completed.” 43 C.F.R. § 3809.21(a). Plan-level operations are those operations which are “greater than casual use,” and yet are not notice-level operations described in 43 C.F.R. § 3809.21. 43 C.F.R. § 3809.11(a). Thus, plan-level operations encompass operations that are greater than casual use, except for notice-level operations covered by 43 C.F.R. § 3809.21(a)

In addition, section 3809.11 lists seven “special status” areas in which Section 3809.21 does not apply and a plan of operations is required for any operations causing surface disturbance greater than “casual use.” These include “[a]ny lands or water known to contain Federally proposed or listed threatened or endangered species or their proposed critical habitat, unless BLM allows for other action under a formal land-use plan or threatened or endangered species recovery plan.”

While the exact hydrogeology of the Project and its repercussions on springs in the Refuge are not known at this time, the proposed operations here will, in all likelihood and per Rover’s own notice, intersect groundwater which also supplies spring flows to Fairbanks Spring and other springs within the Refuge. Several proposed drill sites are less than half a mile away from Fairbanks Spring and within just a few hundred feet of the Refuge boundary, and the applicant admits that each borehole will likely encounter groundwater. The Refuge springs and associated surface-water flows support several endangered and threatened species, some of which exist nowhere else on Earth, and all of which are fully dependent upon groundwater. Potentially affected plant species listed under the Endangered Species Act include:

- Ash Meadows blazing star (*Mentzelia leuciphylla*), threatened;
- Amargosa Niterwort (*Nitrophila Mohavensis*), endangered;
- Ash Meadows milkvetch (*Astragalus phoenix*), threatened;
- Ash Meadows sunray (*Enceliopsis nudicaulis corrugata*), threatened;
- Ash Meadows gumplant (*Grindelia fraxinoperatensis*), threatened;
- Ash Meadows ivesia (*Ivesia Kingii* var. *eremica*), threatened;
- Spring-loving centaury (*Zeltnera namophili*), threatened;

- Ash Meadows naucorid (*Ambysus amargosus*), threatened;

Potentially affected fish species listed under the Endangered Species Act include:

- Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*), endangered;
- Ash Meadows speckled dace (*Rinichtys osculus nevadensis*), endangered;

Although the proposed operations do not entail an increase in consumptive use of groundwater, Refuge springs and the protected species they harbor may still be subject to significant impacts from any exploration drilling that intersects the groundwater aquifer. Past mineral exploration operations in the Amargosa Basin have induced significant changes in groundwater and surface water flow, even though they did not seek to extract groundwater. For instance, in 1967 an exploratory drill hole near Tecopa, California encountered pressurized groundwater at a depth of 360 feet, creating an artesian spring that continues to flow today. Several attempts to plug the well failed, and the new artesian flow diverted water from several naturally occurring springs, substantially reducing discharge. The site is now known as Borehole (or Bore Hole) Spring. If something similar were to happen during the exploration operation proposed here, the result would be catastrophic for the threatened and endangered species that depend on Ash Meadows spring flows.

Because the proposed drilling operations will directly affect an essential component of the habitat for several threatened and endangered species, they cannot be lawfully authorized as a notice-level operation and must instead proceed—if they may proceed at all—under a plan of operations. The Center therefore requests that BLM deny permission to proceed under a notice and require the applicant to either submit a plan of operations or abandon the proposal.

Another of the “special status” areas outlined in 3809.11 in which Section 3809.21 does not apply and a plan of operations is required for any operations causing surface disturbance greater than “casual use” is within Areas of Critical Environmental Concern (ACECs). The Refuge is surrounded by the Ash Meadows ACEC, a unit managed by your office and so designated to protect the groundwater dependent endemic species of the greater Ash Meadows area. It appears that the drill sites proposed by Rover may be within the boundaries of the Ash Meadows ACEC. When plotted using NAD27 data, the drill holes are right on the boundary of the ACEC; when plotted using NAD83 data, the drill holes are within the ACEC.¹ Additionally, according to a map provided by Rover,² the Project Area includes part of the Amargosa Mesquite ACEC, also managed by your office. The Project clearly intersects with ACECs, potentially in multiple areas, and thus should be subject to a plan of operations and requisite environmental analysis before proceeding.

¹ See map, Attachment 1.

² “Geology and Lithium Mineralization of the Let’s Go Lithium Project, Nye County, Nevada.” John E Zimmerman. October 4, 2022. Attachment 2.

BLM Must Consult With the U.S. Fish and Wildlife Service to Ensure the Proposed Exploration Activities Do Not Jeopardize the Continued Existence of any Threatened or Endangered Species.

ESA Section 7 requires federal agencies to ensure that none of their activities, including the granting of licenses and permits, will jeopardize the continued existence of listed species or adversely modify a species' critical habitat. *Babbitt v. Sweet Home Chapter of Cmty. For a Great Or.*, 515 U.S. 687, 692 (1995) (citing 16 U.S.C. § 1536(a)(2)).

Section 7 requires BLM to consult with FWS before engaging in any action that may affect a listed species or critical habitat. *Karuk Tribe of Cal. v. United States Forest Serv.*, 681 F.3d 1006, 1019-20 (9th Cir. 2012). The purpose of consultation is to obtain the expert opinion of a wildlife agency to determine whether the action is likely to jeopardize a listed species or adversely modify its critical habitat and, if so, to identify reasonable and prudent alternatives that will avoid the action's unfavorable impacts. *Id.* The consultation requirement reflects "a conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies." *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 185 (1978).

Section 7(a)(2) of the ESA provides:

Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species

16 U.S.C. § 1536(a)(2).

Regulations implementing Section 7 provide:

Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required

50 C.F.R. § 402.14(a).

Section 7 of the ESA defines agency action as "any action authorized, funded, or carried out by [a federal] agency." 16 U.S.C. § 1536(a)(2). There is "little doubt" that Congress intended agency

action to have a broad definition in the ESA. *Pac. Rivers Council v. Thomas*, 30 F.3d 1050, 1054-55 (9th Cir. 1994) (citing *Tenn. Valley Auth.*, 437 U.S. at 173); *see also W. Watersheds Project v. Matejko*, 468 F.3d 1099, 1108 (9th Cir. 2006). Accordingly, the Ninth Circuit has confirmed that authorization of notice-level mining operations constitutes discretionary “agency action” within the meaning of the ESA, and requires Section 7 consultation. *Karuk Tribe*, 681 F.3d at 1026.

As in *Karuk Tribe*, consultation is required here because BLM’s approval of the Project is a discretionary action which may influence mining operations to protect ESA-listed species. *See id.* at 1025-26. Specifically, BLM’s mining regulations confer authority on the agency to determine whether any proposed mining activity properly qualifies as notice-level or must instead proceed under a plan of operations. 43 C.F.R. § 3809.313. *See also LKA International, Inc.*, 175 IBLA 225, 230 (2008) (“LKA recognizes that BLM can, under 43 C.F.R. §§ 3809.312(a) and 3809.313, lawfully prohibit LKA from proceeding with the tunnel project under the NOI, if it properly determines, as a matter of law, that the proposed operation does not qualify as a notice-level operation under 43 C.F.R. § 3809.11 or § 3809.21.”). BLM is specifically direct to prohibit notice-level mining operations in “special status areas,” including lands and waters containing endangered and threatened species. 43 C.F.R. § 3809.11.

In addition, BLM is required by section 302(b) of the Federal Land Policy and Management Act of 1976 (“FLPMA”), 43 U.S.C. § 1732(b) (2000), and 43 C.F.R. Subpart 3809 to ensure that no proposed activity under the mining laws results in unnecessary or undue degradation of the public lands. *Mineral Policy Center v. Norton*, 292 F. Supp.2d 30, 33, 41-46 (D.D.C. 2003). When unnecessary or undue degradation is likely to occur, BLM is required to take appropriate steps to preclude such degradation, including requiring a notice-level operator, pursuant to 43 C.F.R. §§ 3809.312(a) and 3809.313, to modify its proposed operations in such a manner as “to prevent unnecessary or undue degradation,” or barring an operator, pursuant to 43 C.F.R. § 3809.311(c), from conducting operations where it is unable “to prevent unnecessary or undue degradation.” *See also LKA International, Inc.*, 175 IBLA at 234-35.

Because the mining regulations confer substantial discretion on BLM regarding the administration of notice-level mining activities, and bar certain operations from proceeding under a notice, the Project is subject to ESA consultation. *Karuk Tribe*, 681 F.3d at 1026.

An agency has a duty to consult under Section 7 of the ESA for any discretionary agency action that “may affect” a listed species or designated critical habitat. *Turtle Island Restoration Network v. Nat’l Marine Fisheries Serv.*, 340 F.3d 969, 974 (9th Cir. 2003) (citing 50 C.F.R. § 402.14(a)). BLM may avoid the consultation requirement only if it properly and lawfully determines that its action will have “no effect” on a listed species or critical habitat. *Sw. Ctr. for Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1447-48 (9th Cir. 1996).

As discussed above, the proposed drilling operations will directly affect a key component of several listed species' habitat, and thus "may affect" those species. BLM must therefore consult with FWS to ensure the Project will not jeopardize these species' continued existence. BLM may not authorize any operations that would constitute a "irreversible and irretrievable commitment of resources until consultation is complete. *See* 16 U.S.C. § 1536(d).

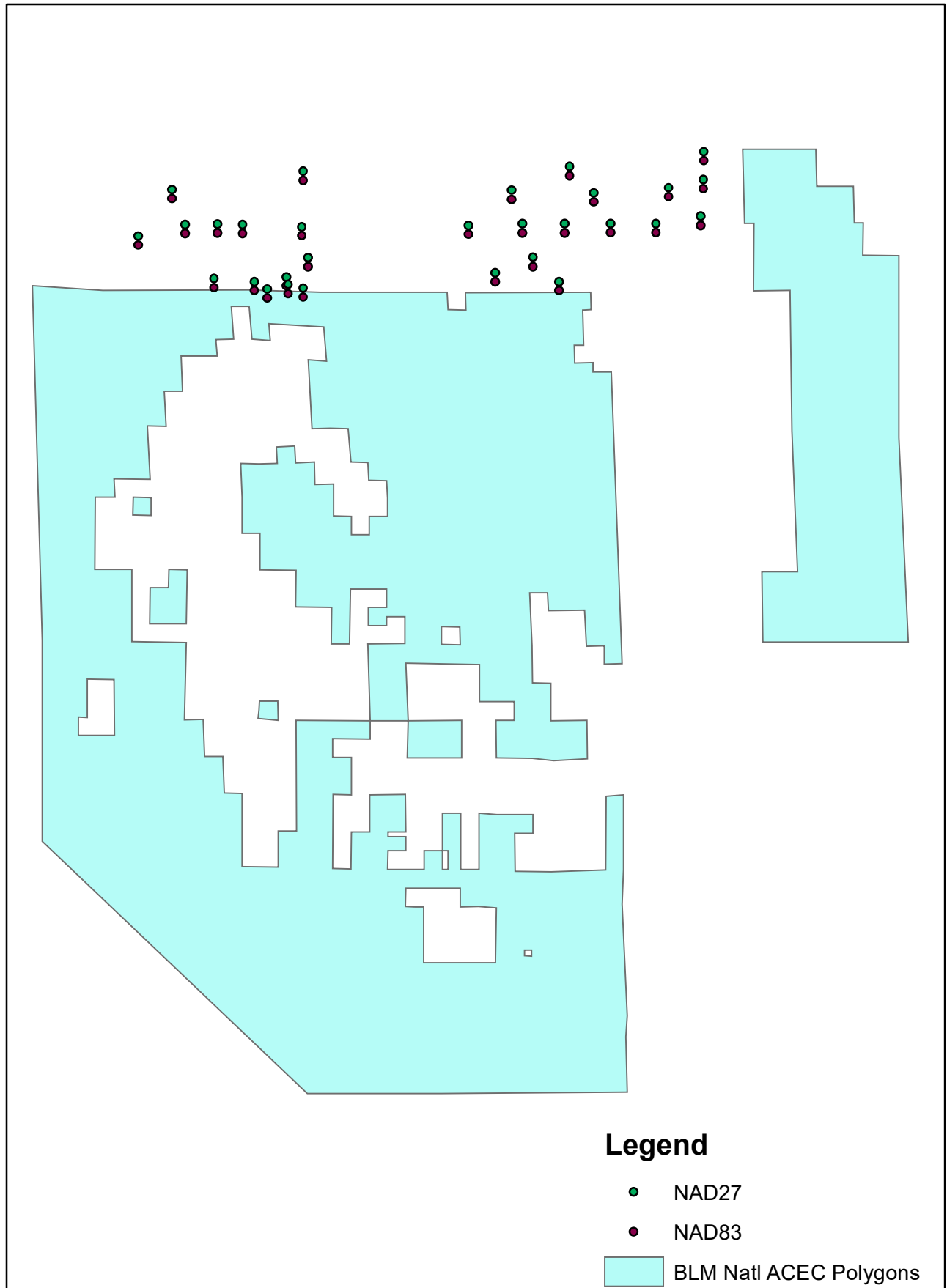
Conclusion

The proposed exploration drilling poses an existential and unacceptable risk to threatened and endangered species, and therefore cannot be authorized under a notice. The Center is prepared to take legal action, if necessary, to prevent any unlawful authorization of mineral exploration that would violate either the mining regulations or the ESA. However, is our practice to pursue negotiations whenever possible. In keeping with this policy, we invite BLM to contact us to discuss the issues raised in this letter.

Sincerely,

/s/ Scott Lake

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Geology and Lithium Mineralization of the Let's Go Lithium Project Nye County, Nevada

John E Zimmerman
GenGold2, LLC 10/4/2022



Location

The Let's Go Lithium Project (LGL) is a new Nevada lithium claystone project located in the Amargosa Valley of southwestern Nevada, about 80 miles northwest of Las Vegas (see Figure 1 below).

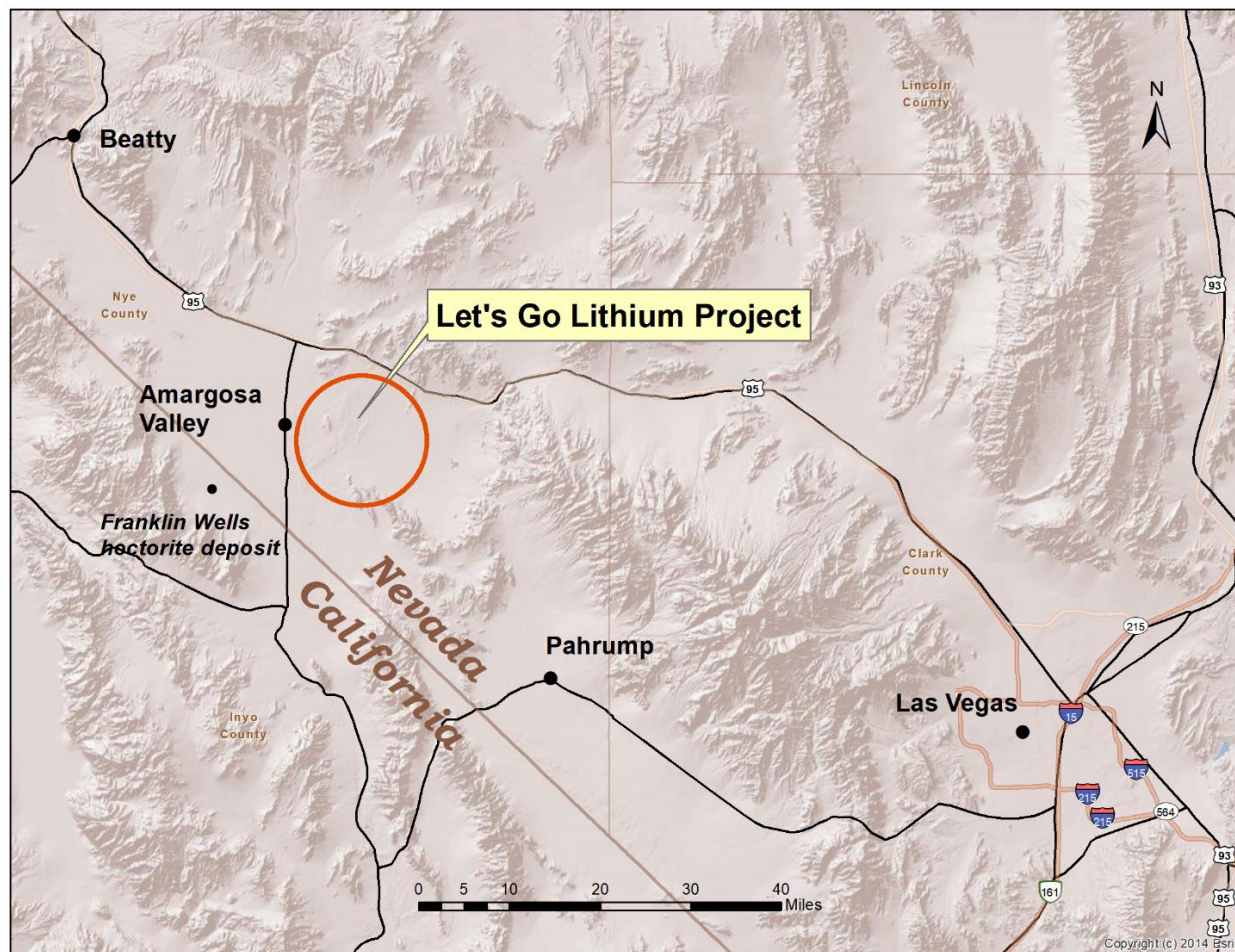


Figure 1. Project Location

Lithium Mineralization Highlights

Several factors point to the strong lithium potential of the Let's Go Lithium ("LGL") project:

1. It is located within the Southwest Nevada Lithium Province (see Figure 2 below), where lithium is currently produced from brines, and several lithium claystone projects have been identified and developed to the Feasibility/Pre-Feasibility pilot plant stage;
2. LGL is located in a large basin of clay rich Tertiary lakebed sediments, the major host rock for the other lithium claystone deposits in the province. Claystone beds up to 500 feet thick are reported from water wells drilled in the area including on the project itself (see Table 1 – Select Water Well Drill Logs below).
3. Lithium in commercial grades are known in the area:
 - a. At the Franklin Wells Hectorite deposit on the west edge of the basin (no resource grade known but values of up to 3,110 ppm Li reported by the U.S. Geological Survey).

- b. Samples collected at the LGL project by John Zimmerman contain up to 820 ppm lithium in surface grab samples (certified by ALS Labs, see Appendix 1). Handheld Laser Induced Breakdown Spectroscopy (“HH LIBS”) samples have returned lithium values of up to 1,218 ppm Li on the project (see Appendix 2).
- c. PhD reported literature in “purified fine gray clay separates” of values of up to 3,800 ppm Li from locations near the project area (Khoury¹, et al).
- d. The ABCs of Lithium Mining is that grades of 680ppm Li and higher are considered to be high grade².

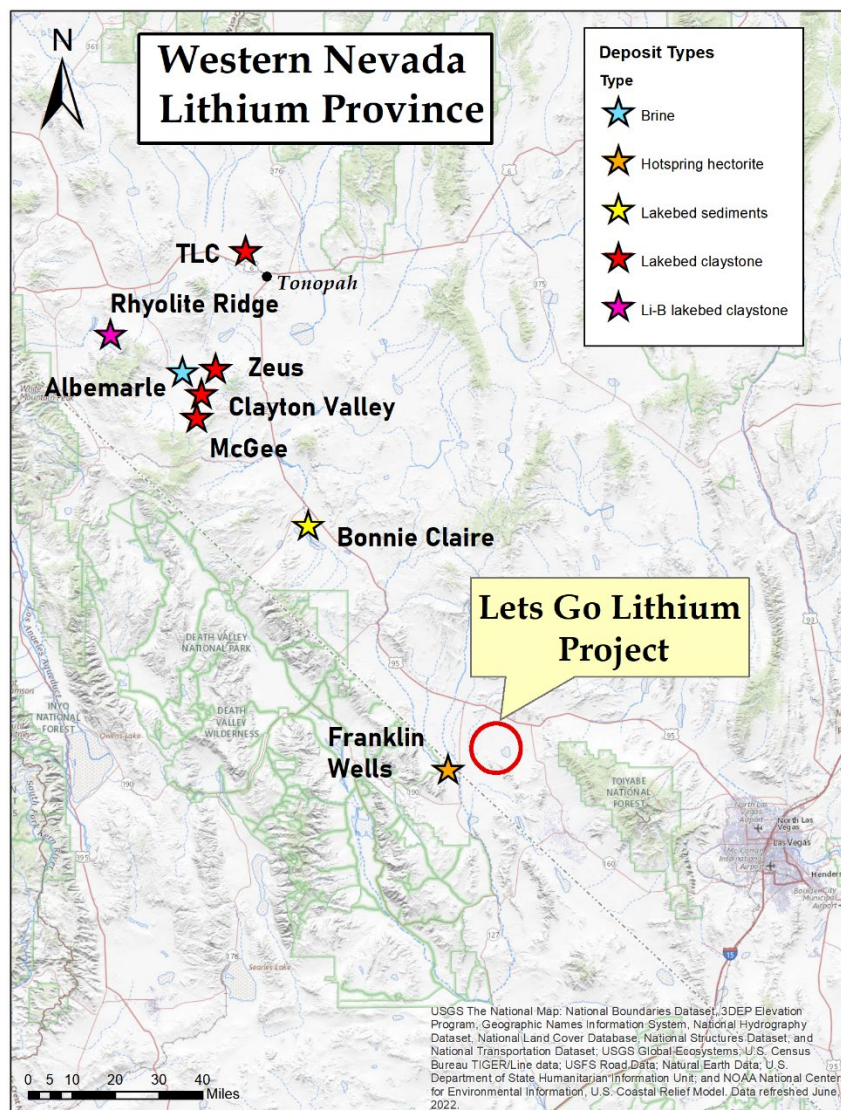


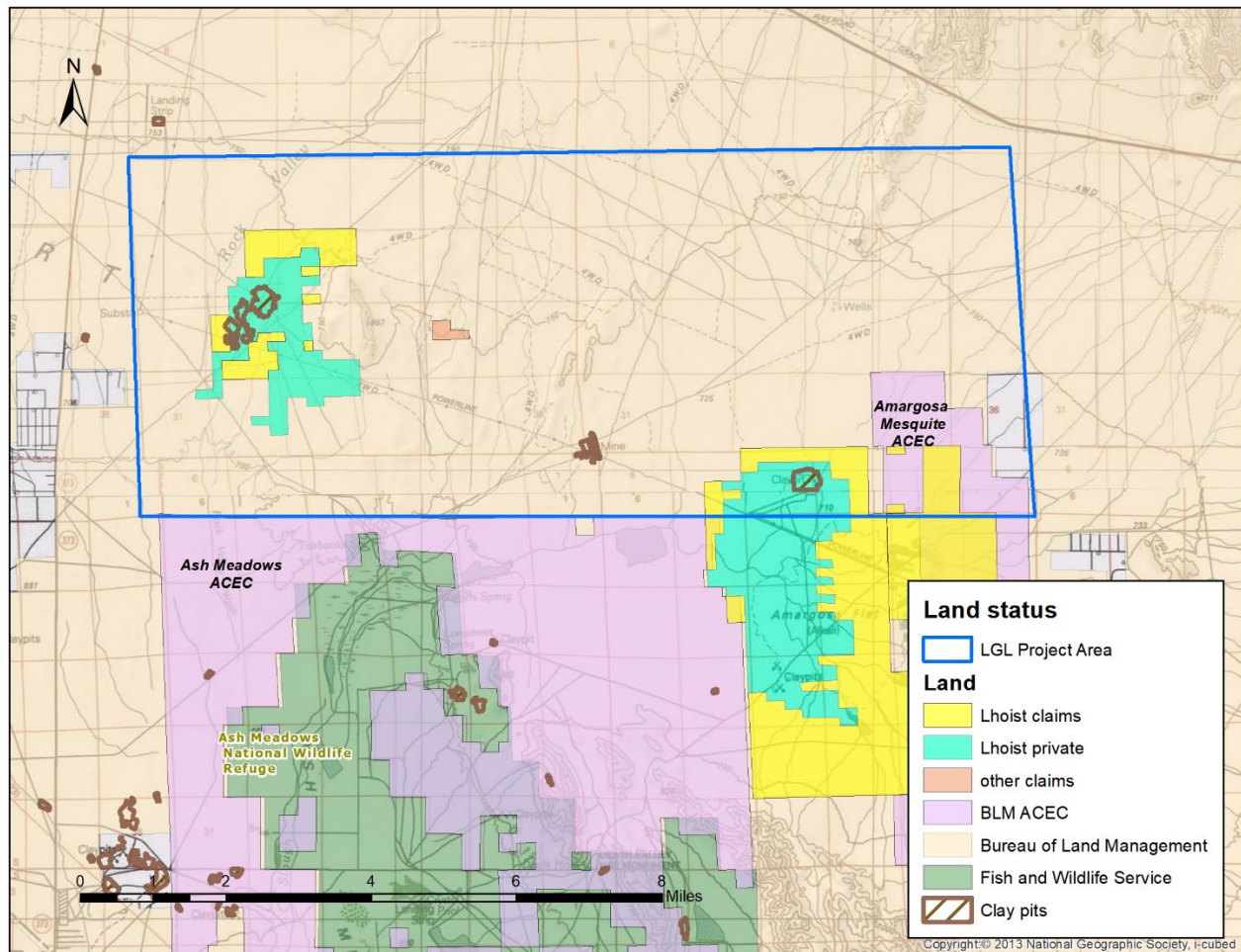
Figure 2. Southwest Nevada Lithium Province

Land status

Land status of the project area is shown in Figure 3 below. Most of the project area is held by the BLM and is open to mineral location. There are also some pre-existing mining claims and privately held land. GenGold2, LLC, located 296 placer claims in early September 2022 (Figure 3) and these comprise the current project area of approximately 6,000 acres. These were located by the aliquot method (portion

of quarter-quarter section). Two separate sets of claims were located to cover areas of known lithium surface anomalies.

Figure 3. Land Status



Geology

The geography of the project area is generally flat desert landscape typical of an alluvial basin and dry lake bed. It is punctuated by some central low bluffs (see cover page photo). The general geology of the area is described by Bestram³:

“Rocks of lower Paleozoic and Tertiary age make up the highlands and mountains; the lowlands are mantled by various types of Quaternary deposits. Tuffs and tuffaceous sandstones make up the bulk of the Tertiary rocks found in the northern most part of the [Lathrop Wells] quadrangle. Basalt is found, commonly capping ridge tops.

Structurally, the area was affected by two major periods of deformation. During the late Mesozoic early Tertiary phase, compressional deformation predominated. Large easterly-directed thrust faults, accompanied by folding and strike-slip faulting, were the rule. About 17 million years ago, a major change occurred in the tectonic setting of the region with the onset of extensional faulting and volcanic activity (Stewart, 1980). Basin and range faulting, which began in the Miocene and continued to the Holocene, is responsible for the topography and geology seen today. It is suggested

by Denny and Drews (1965) and Khoury (1978)⁴ that during the Pleistocene much of the lowlands in the Lathrop Wells and Ash Meadows quadrangles were covered intermittently by a series of pluvial lakes. Significant amounts of lacustrine sediments were deposited in the area during this period as well as the continuing influx of fluvial clastics.”

Four geologic maps have been produced covering the project area and immediately surrounding area. The work of Swadley⁵ 1983 of the USGS shows several Quaternary units at the surface in the project area (Figure 4 below). These include thin younger (Pleistocene) units including eolian sands (Q1s) and fluvial sands and gravels (Q2c, Q2bc). Under these are somewhat older units (Pliocene and Pleistocene) alluvium QTa, a thin limestone unit (QTII) and a marl unit (QTId). The marl unit is likely the surface exposure of a thick bed of claystone that is known from water wells to be up to 500 feet thick. It is dated at 800,000 years from an included ash bed. These units are all flat lying or nearly flat. Limestone capped buttes in the center of the area are probably uplifted fault blocks and show a minor amount of tilt, less than 5 degrees. Lhoist of Nevada has been producing specialty clays from the marl for over 50 years from shallow open pits north and south of the claim block.

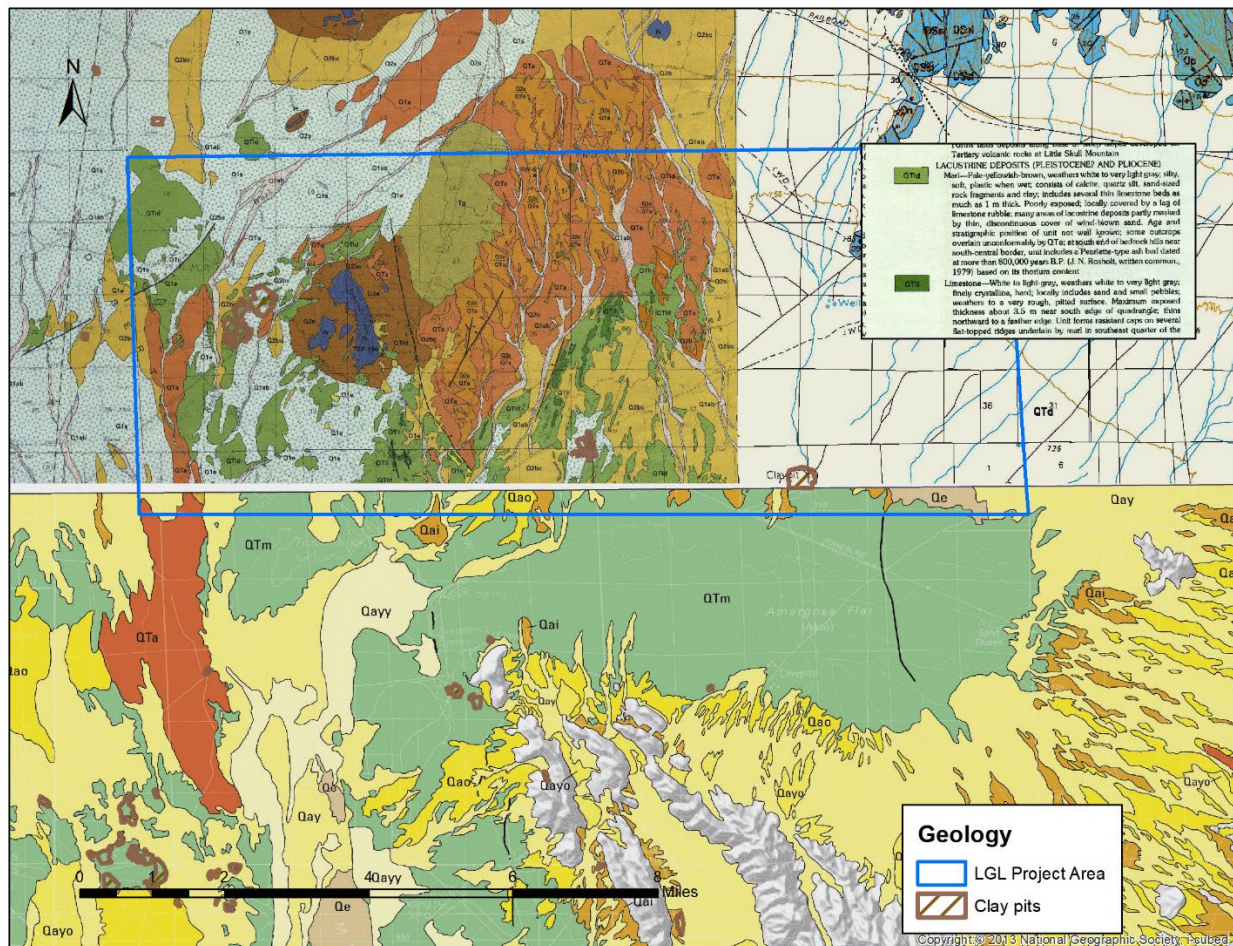


Figure 4. Geology

Numerous water wells have been drilled in the Amargosa Flats area and simple drill logs are available for many (see Figure 5 below). They generally show thicknesses of clay beds (some with mixed silt, sand,

and gravel) of 123 to 500 feet. Some of the clay was noted be gray or light gray in color, a characteristic that correlates with higher lithium values at American Lithium's (TSX: LI) TLC Project (Dave Mough, personal communication, 2022).

Figure 5. Area Water Wells

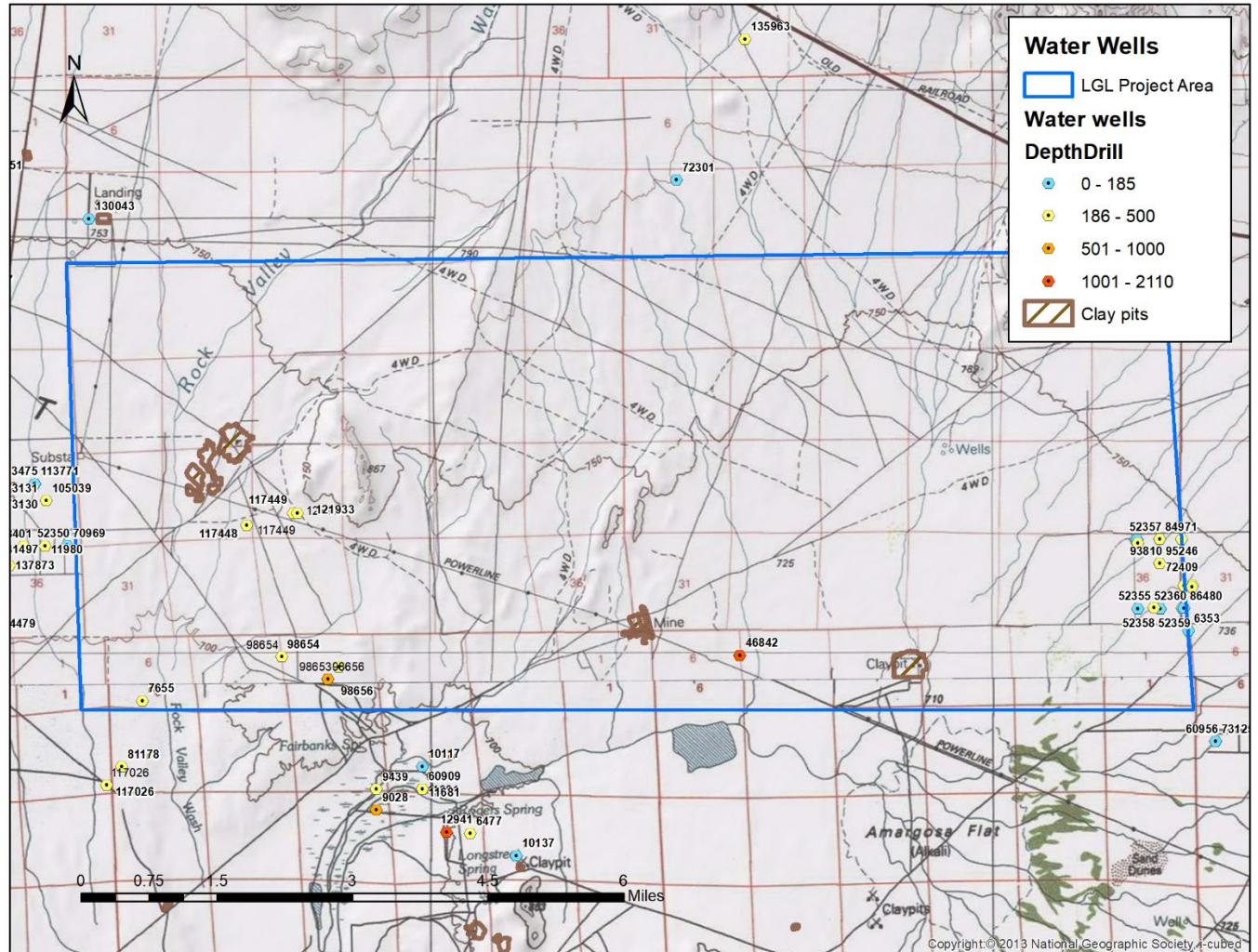


Table 1.1 Select drill logs from the Let's Go Lithium Project

Log #	Depth (ft)	Date	Water Table	From ft	To ft	Lithology	Clay total	Note
98654	500	9/01/05	47	0	20	clay/sand		
				20	160	clay		
				160	300	clay/gravel		
				300	500	clay	500	
98656	510	9/01/05	0	0	20	gravel		artesian after lift test
				20	300	clay		
				300	350	gravel		
				350	390	clay	320	
				390	510	bedrock?		
28820	200	7/01/87	131	0	200	silt/clay	200	
46842	2110	11/01/94	na	0	260	brown clay		
				260	360	sand		
				360	487	brown clay	387	
				487	515	basalt		
				575	2110	silt/sand/clay		
						Average	352 ft 107 m	
			clay interval					

Table 1.2 Select drill logs from surrounding area

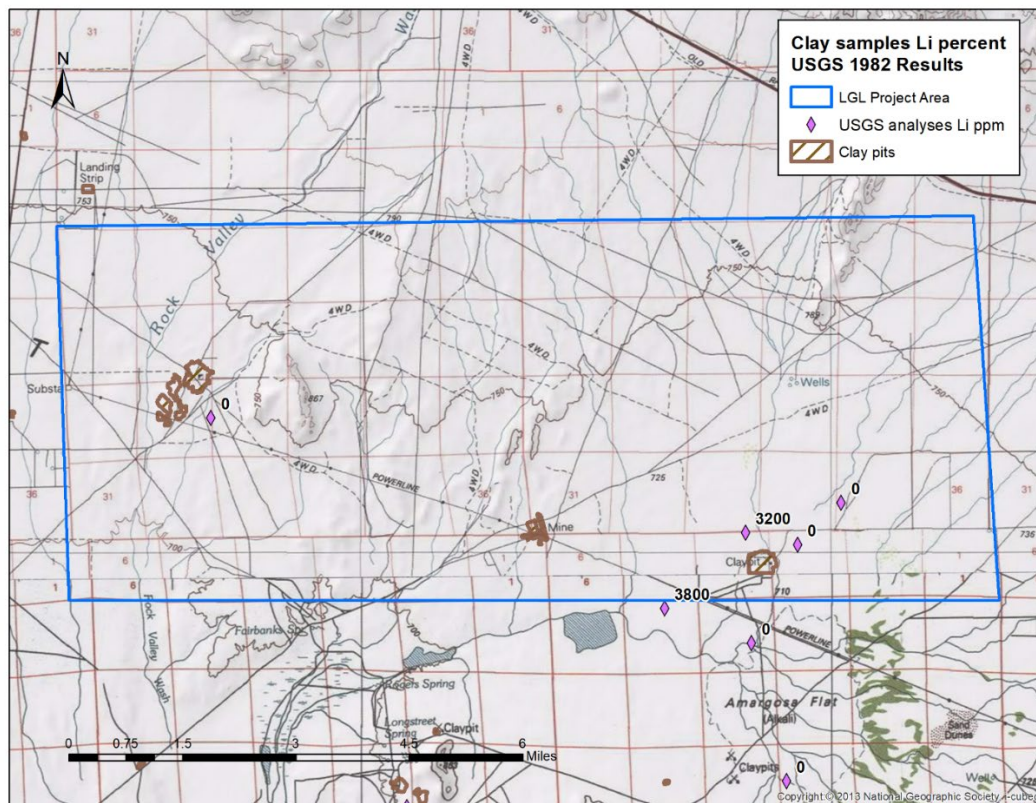
Log #	Depth (ft)	Date	Water Table	From ft	To ft	Lithology	Clay total	Note
52335	151	8/01/79	56	0	28	sand		east of map
				28	105	clay		
				105	107	limestone		
				107	130	clay/gravel		
				130	144	gray clay		carbon?
				144	151	clay/lime	121	
117448	225	6/01/13	60	0	13	clay/sand		
				13	225	calcified ash	225	clay??
117026	350	2/01/13	70	0	103	sand/gravel		
				103	123	brown clay		
				123	126	sand/gravel		
				126	173	gray clay		carbon?
				173	174	sand/gravel		
				177	310	clay		
				310	345	gravel/clay		
				345	350	gray clay	240	carbon?
81178	240	8/01/00	na	0	10	sand		
				10	205	clay/sand	195	
				205	215	sand/gravel		
				215	240	limestone		
7655	400	10/01/63	85	0	240	clay/sand		
				240	340	clay/talc	340	
				340	350	sand		
				350	392	talc/lime		
						Average	224 ft 68.2 m	
			clay interval					

Lithium Mineralization

High lithium contents have been identified in clays from several areas in and near the project. These include an identified historic lithium resource at the Franklin Wells deposit about 7.5 miles southwest of the project area in California (Figure 1 above) on the western edge of the Amargosa Valley. This deposit is reported to contain about 66,000,000 tons of ore at an unspecified grade but an imputed value of \$1,330,000,000 (Wilkerson⁶ et al, 2001); the USGS has reported individual sample values up to 3,110 ppm Li from the pit area. This deposit is long and linear, being 3 miles long and 700 feet wide. This linear aspect and the local alteration and breccias indicate that it was formed by hot spring activity along a fault zone (Wilkerson⁶, et al, 2001).

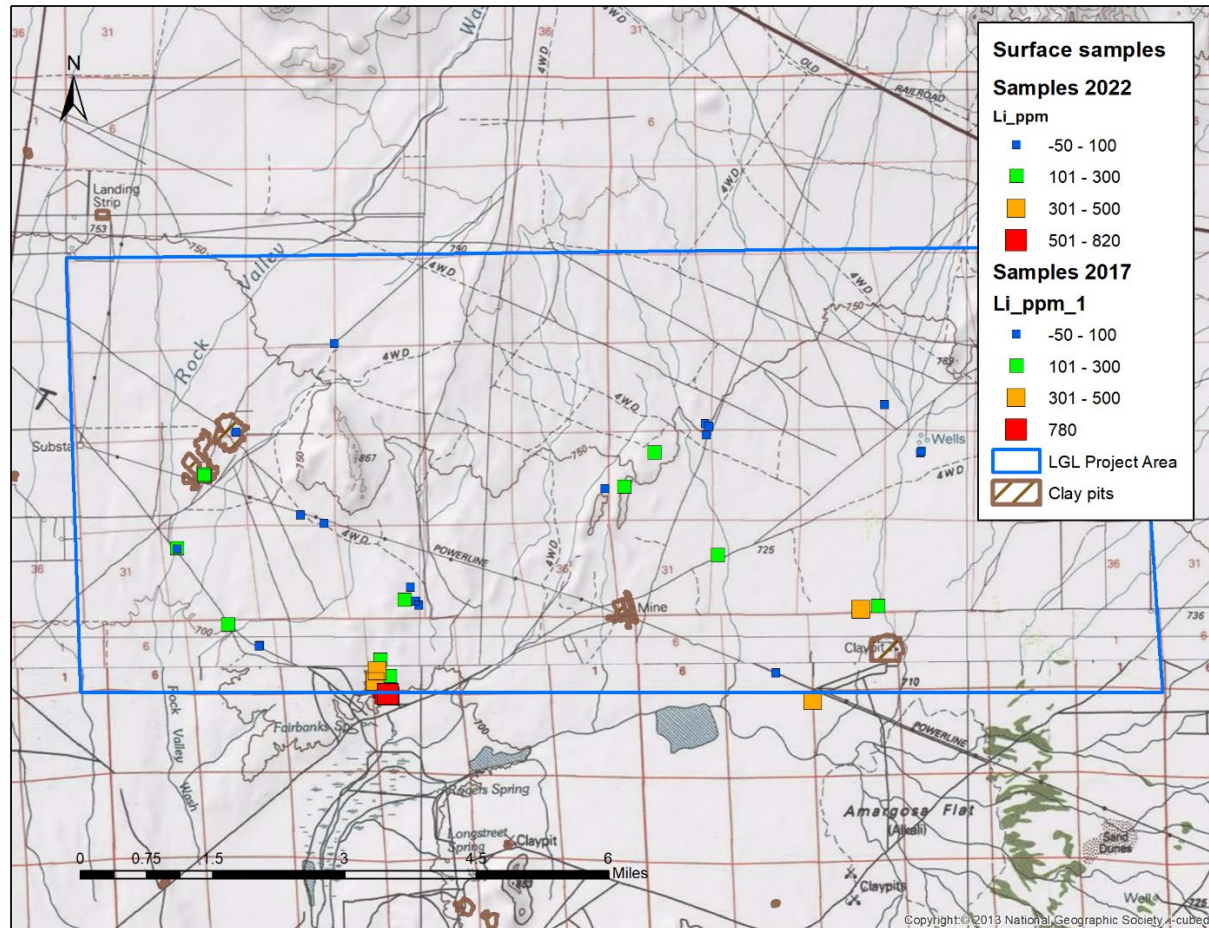
Eberl, et al (1982), and Khoury (1979)⁴ reported strong lithium values from samples collected from clay mine pits and auger holes near the project area (see Figure 6b below). These samples are described as being collected every 15 cm from auger holes and pits generally less than 10 meters deep; one hole was drilled to 35 meters. This material was then “purified” or centrifuged to produce an ultra-fine (<0.1 micron) clay sample. The USGS analyzed these samples for lithium and returned values of 100 to 1,400 ppm lithium in 13 samples as reported by Khoury (1979)¹, and from 2,700 to 3,800 ppm for 3 samples as reported by Eberl et al (1982)⁴ (see Figure 6a below). Those three samples are from the same locations as reported by Khoury¹ who reported values of 1,400 ppm, 1,000 ppm, and 500 ppm Li; the discrepancy in values is not explained by Eberl⁴, et al. As these samples have been processed to produce an ultra-fine fraction, they do not represent whole rock lithium values. They do suggest though that lithium is present in the clay beds in significant amounts.

Figure 6a. U.S. Geological Survey Lithium PPM Values near to Let's Go Lithium Project



The author has sampled numerous sites in and around the Let's Go Lithium project area. There are few areas of true outcrop (see picture of butte on cover page photo), and most of the samples come from dumps and subcrop and one pile of drill cuttings. Values of up to 820 ppm have been returned from green clay material (dump and subcrop) by a 4 acid method (ALS Labs LiOG63) (see Appendix 1 below) and up to 1,252 from HH LIBS analyses (see Appendix 2 below). The most consistent high values have come from green clays at the base of the largest butte on the project (see picture of butte on cover page photo), in prospect pits and subcrop (see Figure 6b below). This area is approximately 100 feet below the top of the butte and likely represents the deepest exposure of the marl unit (QTld).

Figure 6b. Lithium Values in Surface Samples from Let's Go Lithium Project



Metallurgical Test

Three pulps from remaining from the samples discussed above were re-run by a weak acid extraction technique (ALS laboratory method ME-MS41W, Table 2 below). A good percentage of the lithium, 64% to 98%, was extracted by the weak aqua regia acid (nitric and hydrochloric acids). This indicates that the lithium in the claystone is not bound up tightly in the mineral structure but is readily leached by weak acids. This suggests that LGL lithium claystones may be amenable to the extraction techniques being demonstrated by Cypress Development at Clayton Valley and American Lithium at TLC on their lithium claystone deposits.

Table 2. Lithium extraction by dilute acid				
Year		Analytic method	Analytic method	
	ID	LiOG63	ME-MS41W	ME-MS41W
	ID	Li ppm	Li ppm	Percent
2017	AMZ-26	930	910	98%
2017	AMZ-28	780	710	91%
2017	AMZ-29	470	302	64%

Exploration Plan

With its setting, strong surface lithium values, and thick clay beds, the LGL Project represents an excellent target for a lithium claystone deposit. The next major step at the project should be RC or RAB drilling the clay beds to depths of 250 to 300 feet in several wide spaced holes to test the lithium values in the clay beds at depth. While more surface sampling and auger drilling could be conducted before a drill test, they would not represent either a negative or positive test of the clay bed section, as so little of the section is exposed for sampling. Real testing can only be done with a drill. For a first pass, five wide spaced holes in each of the two claim blocks will be sufficient and any significant lithium concentrations should have good lateral continuity. The drill budget is approximately CAD200,000.

References

1. Khoury, H. N. (1979) Mineralogy and chemistry of some unusual clay deposits in the Amargosa Desert, southern Nevada: Ph.D. Thesis, University of Illinois, Urbana, Illinois, 171 pp.6.
2. Google Search: Mining.com, Lithium ABCs
3. Bestram, B., 1985, Mineral Patent Application of Industrial Mineral Ventures, Inc for the Cat, Dry, and Ewing Placer Mining Claims, BLM report on file at the BLM Worland Office, Worland, WY.
4. Eberl, Dennis D, Jones, Blair F. and Khoury, Hani N., 1982, Mixed-Layer Kerolite/Stevensite from the Amargosa Desert, Nevada; Clays and Clay Minerals, Vol 30, No. 5, 321-326.
5. Swadley, W C, 1983, Map showing surficial geology of the Lathrop Wells quadrangle, Nye County, Nevada; USGS Miscellaneous Investigations Series Map I-1361, scale 1:48,000.
6. Wilkerson, Gregg, Bureau of Land Management, Vredenburg, Larry, Bureau of Land Management; Serenko, Thomas J., Southern Clay Products, Inc; Eyde, Ted H., Gadsden Sonora Holdings LLC, 2001, The Franklin Wells Hectorite Deposit, Inyo County, California, from The Changing Face of the East Mojave Desert, Abstracts from the 2001 Desert Symposium, California State University, Desert Studies Consortium.

Appendix 1. ALS Certified Surface Samples - Let's Go Lithium Project

ID2	Year	LITH	WIDTH	TYPE	X_utm27	Y_utm27	Li-OG63%	Li ppm
FB22-1	2022	claystone	1	outcrop	557093	4039773	0.006	60
FB22-2	2022	claystone	1	outcrop	557094	4039773	0.005	50
FB22-3	2022	claystone	1	outcrop	557094	4039773	0.005	50
FB22-4	2022	claystone	1	outcrop	555578	4041544	0.011	110
FB22-5	2022	claystone	1	outcrop	556512	4040147	0.016	160
FB22-6	2022	claystone	1	dump	565249	4043834	0.005	50
FB22-7	2022	clay	1	dump	568102	4040440	0.039	390
FB22-8	2022	claystone	1	dump	568411	4040488	0.011	110
FB22-9	2022	clay	1	outcrop	569184	4043299	-0.005	-50
FB22-10	2022	clay	1	subcrop	569203	4043328	-0.005	-50
FB22-11	2022	clay	1	dump	568526	4044178	0.007	70
FB22-12	2022	clay	1	dump	565473	4041418	0.011	110
FB22-12b	2022	gypsum clay	1	dump	559441	4038886	0.082	820
FB22-13	2022	clay	1	subcrop	559487	4038851	0.037	370
FB22-14	2022	clay	1	subcrop	559401	4038901	0.061	610
FB22-15	2022	clay	1	dump	566538	4039269	0.01	100
FB22-16	2022	clay	1	subcrop	559365	4039001	0.051	510
FB22-17	2022	clay	1	subcrop	559441	4038885	0.048	480
FB22-18	2022	clay	1	outcrop	567214	4038769	0.034	340
AMZ-1	2017	qtl	1	outcrop	563773	4042690	-0.005	-50
AMZ-2	2017	qtl	1	outcrop	563764	4042675	0.016	160
AMZ-3	2017	limestone	20	outcrop	563408	4042642	-0.005	-50
AMZ-4	2017	qtl	2	outcrop	564318	4043301	0.011	110
AMZ-5	2017	qtl	1	outcrop	565270	4043627	0.007	70
AMZ-6	2017	qtl	1	dump	565316	4043777	0.006	60
AMZ-7	2017	qtl	1	outcrop	547160	4030693	0.067	670
AMZ-8	2017	qtl	1	outcrop	547121	4030643	0.078	780
AMZ-9	2017	qtl	50	trench	545777	4031907	0.021	210
AMZ-10	2017	qtl	40	dump	546005	4031775	0.007	70
AMZ-11	2017	qtl	5	dump	559441	4038881	0.057	570
AMZ-12	2017	qtl	6	outcrop	559414	4038914	-0.005	-50
AMZ-13	2017	qtl	1	outcrop	559430	4038973	0.009	90
AMZ-14	2017	qtl	20	outcrop	559425	4038956	0.012	120
AMZ-15	2017	qtl	8	dump	559410	4038899	0.045	450
AMZ-16	2017	qtl	660	outcrop	541442	4040902	-0.005	-50
AMZ-17	2017	qtl	1	dump	541831	4040068	-0.005	-50
AMZ-18	2017	clay	5	outcrop	556073	4042872	0.023	230
AMZ-19	2017	clay	5	outcrop	556064	4042898	0.026	260
AMZ-20	2017	clay and limestone	3	outcrop	558272	4042009	0.005	50
AMZ-21	2017	clay	1	dump	557842	4042155	-0.005	-50
AMZ-22	2017	volcanic sandstone	2	outcrop	556663	4043674	0.006	60
AMZ-23	2017	clay	1	trench	558459	4045293	0.006	60
AMZ-24	2017	clay	2	trench	555583	4041536	0.005	50
AMZ-25	2017	shale	3	dump	557082	4039758	-0.005	-50
AMZ-26	2017	clay	20	dump	547222	4030600	0.093	930
AMZ-27	2017	clay	1	float	547201	4030653	0.053	530
AMZ-28	2017	clay	5	dump	559444	4038883	0.078	780
AMZ-29	2017	clay	55	subcrop	559251	4039305	0.047	470
AMZ-30	2017	clay	1	outcrop	559474	4039210	0.017	170
AMZ-31	2017	siltstone	1	subcrop	559296	4039505	0.03	300
AMZ-32	2017	clay	10	dump	559211	4039113	0.032	320
AMZ-33	2017	clay limestone	1	outcrop	559942	4040583	0.005	50
AMZ-34	2017	clay	1	dump	559848	4040840	0.01	100
AMZ-35	2017	clay	1	dump	559736	4040596	0.027	270
AMZ-36	2017	clay	1	dump	560003	4040509	0.006	60
AMZ-37	2017	clay	15	dump	559954	4040579	0.005	50
AMZ-38	2017	limestone clay	1	trench	545776	4031903	0.018	180

Appendix 2. Handheld Laser Induced Breakdown Spectroscopy (“HH LIBS”) samples

ID2	Year	LITH	WIDTH	TYPE	X_utm27	Y_utm27	LIBs avg Li ppm
FB22-7	2022	clay	1	dump	568102	4040440	724
FB22-16	2022	clay	1	subcrop	559365	4039001	1218
FB22-17	2022	clay	1	subcrop	559441	4038885	707
FB22-18	2022	clay	1	outcrop	567214	4038769	406

Attachment 3 to the Declaration of Patrick Donnelly

60-Day Notice of Intent to Sue from the Center for Biological
Diversity to Debra Haaland, Tracy Stone-Manning, John
Zimmerman, and Nicholas B. Pay (May 26, 2023)



May 26, 2023

By Email and Certified Mail

Debra Haaland, Secretary of the Interior
U.S. Department of the Interior
1849 C Street, NW
Washington, D.C. 20240
exsec@ios.doi.gov

Tracy Stone-Manning, Director
Bureau of Land Management
1849 C Street, NW
Washington, D.C. 20240
TStoneManning@blm.gov

Nicholas B. Pay
Field Manager
Bureau of Land Management
Pahrump Field Office
4701 N Torrey Pines Drive
Las Vegas, NV 89130
npay@blm.gov

John Zimmerman
Representative for Rover Metals, Inc.
14403 Rattlesnake Road
Grass Valley, CA 95945
jezimmerman1@comcast.net

Re: Notice of Intent to Sue over Violations of the Endangered Species Act in Connection With Mineral Exploration by Rover Metals, Inc.

Dear Secretary Haaland, Director Stone-Manning, Field Manager Pay, and Mr. Zimmerman:

This letter serves as a sixty-day notice on behalf of the Center for Biological Diversity (“Center”) of intent to sue the Bureau of Land Management (“BLM”) and Rover Metals, Inc. (“Rover”) over violations of the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1536, 1538. The Center is a national nonprofit conservation organization with over 1.7 million members and supporters throughout Nevada and the United States. The Center’s Great Basin program focuses on the protection of wildlife and endangered species, the preservation of public lands, and the sustainability of groundwater resources. Because of this mission, the Center has longstanding interests in protecting groundwater-dependent species and ecosystems within the Ash Meadows National Wildlife Refuge (“Refuge”) and along the Amargosa River.

On January 20, 2023, Rover filed a notice of intent, pursuant to BLM mining regulations at 43 C.F.R. § 3809.21, stating that Rover intends to conduct mineral exploration activities on BLM public lands directly adjacent to Ash Meadows National Wildlife Refuge (“Refuge”) and in close proximity to a major groundwater-dependent spring known as Fairbanks Spring. After BLM requested corrections, Rover re-submitted the notice on March 25, 2023. BLM accepted the

corrected notice on April 5, 2023. According to the corrected notice, all drill holes are expected to encounter groundwater. Consequently, this exploration operation may impact groundwater-dependent ecosystems and species within the Refuge, including several species listed under the Endangered Species Act (“ESA”).

BLM has accepted Rover’s notice and thus authorized the proposed exploration project without first complying the requirements of ESA Section 7(a)(2), 16 U.S.C. § 1536(a)(2). BLM has therefore failed to ensure that agency-authorized mineral exploration activities will not cause jeopardy to ESA-listed species or adversely modify designated critical habitat. Further, neither BLM nor Rover have obtained a valid incidental take statement, meaning that any habitat degradation caused by the proposed exploration project that actually kills or injures listed fish species would constitute unlawful “take” under ESA Section 9. *See* 16 U.S.C. § 1538(a)(1). The Center is prepared to sue if BLM and Rover do not act to remedy these violations within 60 days.

Requirements of the ESA

The Endangered Species Act is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). “[T]he plain intent of Congress in enacting the [ESA] was to halt and reverse the trend toward species extinction, whatever the cost.” *Id.* at 184.

ESA Section 7(a)(2) requires each federal agency, “in consultation with and the assistance of” the U.S. Fish and Wildlife Service (FWS), to “insure that any action” it “authoriz[es], fund[s], or carri[e]s out . . . is not likely to jeopardize the continued existence of any endangered species . . . or result in the destruction or adverse modification of [designated critical] habitat.” 16 U.S.C. § 1536(a)(2). This language imposes both substantive and procedural duties on all federal agencies. Procedurally, “[e]ach agency contemplating an action likely to affect a listed species must first confer with . . . the FWS . . . before taking the action” to ensure that the proposed action will not jeopardize and endangered species or adversely modify critical habitat. *Pyramid Lake Paiute Tribe of Indians v. United States Dep’t of Navy*, 898 F.2d 1410, 1415 (9th Cir. 1990) (emphasis added) (citing 16 U.S.C. § 1536(a)(2); 50 C.F.R. §§ 402.01(b), 402.12). Substantively, an agency must avoid any action that jeopardizes an endangered species or adversely modifies critical habitat. *See Thomas v. Peterson*, 753 F.2d 754, 763 (9th Cir. 1985); *Carson-Truckee Water Conservancy Dist. v. Clark*, 741 F.2d 257, 262 (9th Cir. 1984); *Sierra Club v. Marsh*, 816 F.2d 1376, 1385 (9th Cir. 1987); *Pyramid Lake Paiute Tribe*, 898 F.2d at 1414.

“[T]he strict substantive provisions of the ESA justify more stringent enforcement of its procedural requirements, because the procedural requirements are designed to ensure compliance with the substantive provisions.” *Thomas*, 753 F.2d at 764; *see also Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 741 (9th Cir. 2020). If an action is allowed to proceed without

compliance with those procedural requirements, “there can be no assurance that a violation of the ESA’s substantive provisions will not result.” *Thomas*, 753 F.2d at 764.

Section 9 of the ESA absolutely forbids all persons, including federal agencies, from “taking” any endangered fish or wildlife species. 16 U.S.C. § 1538(a)(1)(B) to (C); *see also* 50 C.F.R. § 17.21(c)(1). “Take” is defined “in the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.” *Sweet Home Chapter*, 515 at 704-05 (1995) (quoting S. Rep. No. 93-307, p. 7 (1973)) It means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” 16 U.S.C. § 1532(19). FWS has further defined “harm” to include: “an act which actually kills or injures wildlife [including] significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” 50 C.F.R. § 17.3. And it has defined “harass” to mean: “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.” *Id.*

Protection from “take” liability is available here only if BLM and Rover complete the Section 7 consultation process and FWS issues a valid Biological Opinion (“BiOp”) and Incidental Take Statement (“ITS”). *See* 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i). A BiOp explains how the proposed agency action will affect the listed species in question, and sets forth FWS’s conclusion as to whether the proposed action will jeopardize the existence of any affected listed species or adversely modify critical habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14. If the BiOp concludes that the agency action is not likely to jeopardize the continued existence of a listed species, but may nevertheless cause some degree of “take,” FWS must provide an “incidental take statement” (“ITS”) along with the biological opinion, specifying the amount or extent of permitted take, describing any “reasonable and prudent measures” that FWS considers necessary or appropriate to minimize impacts to the species, and setting forth the “terms and conditions” that the “action” agency and permittee must comply with in implementing those measures. *Id.* § 1536(b)(4); 50 C.F.R. § 402.14(i).

Ash Meadows NWR

Ash Meadows National Wildlife Refuge consists of over 23,000 acres of Mojave Desert alkali wetland and upland habitat in southeastern Nye County, Nevada, near the town of Amargosa Valley. It is managed by FWS.

The Refuge was established on June 18, 1984, from a combination of private land acquired from The Nature Conservancy and public domain land, in order, “...to protect the endemic, endangered, and rare organisms (plants and animals) found in Ash Meadows...” U.S. Fish and Wildlife Service,

“Environmental Assessment for Proposed Acquisition to Establish Ash Meadows National Wildlife Refuge” (1984). The land was originally slated to become a planned community called Calvada Lakes, developed by Preferred Equity Corporation from Las Vegas. The Nature Conservancy’s acquisition of the property before it could be developed marked one of the most sweeping endangered species habitat preservation actions in the history of the Mojave Desert. The year 2023 marks 50 years since the first acquisition was made, of the area surrounding Big Spring in the southeastern part of the refuge, in 1973.

Ash Meadows is a biodiversity hotspot of global significance. In 1986, Ash Meadows became the 4th designated Ramsar Convention Wetland of International Importance in the United States, described by Ramsar as “an area exhibiting the greatest biological endemism in the USA.”

The Refuge’s springs and associated surface-water flows form diverse wetland habitats that support several endangered and threatened species, most of which exist nowhere else on Earth, and all of which are fully dependent upon groundwater. The following species endemic or near-endemic to the Refuge are protected under the ESA:

- Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*), endangered;
- Ash Meadows speckled dace (*Rinichtys osculus nevadensis*), endangered;
- Warm Springs pupfish (*Cyprinodon nevadensis pectoralis*), endangered;
- Ash Meadows blazing star (*Mentzelia leuciphylla*), threatened;
- Amargosa niterwort (*Nitrophila Mohavensis*), endangered;
- Ash Meadows milkvetch (*Astragalus phoenix*), threatened;
- Ash Meadows sunray (*Enceliopsis nudicaulis corrugata*), threatened;
- Ash Meadows gumplant (*Grindelia fraxinoperatensis*), threatened;
- Ash Meadows ivesia (*Ivesia Kingii* var. *eremica*), threatened;
- Spring-loving centaury (*Zeltnera namophila*), threatened;
- Ash Meadows naucorid bug (*Ambysus amargosus*), threatened;

Additionally, a disjunct segment of Death Valley National Park wholly surrounded by Ash Meadows National Wildlife Refuge contains a unique geologic feature called Devils Hole, which is home to the sole global population of the Devils Hole pupfish (*Cyprinodon diabolis*), also listed as endangered under ESA.

There are also numerous other organisms endemic to the Refuge which are not protected under federal law:

- Warm Springs naucorid bug (*Ambysus relictus*)
- Devils Hole warm spring riffle beetle (*Stenelmis calida calida*)
- Ash Meadows pebblesnail (*Pyrgulopsis erythropoma*)

- Crystal Spring springsnail (*Pyrgulopsis crystalis*)
- Distal-gland springsnail (*Pyrgulopsis nanus*)
- Elongate gland springsnail (*Pyrgulopsis isolatus*)
- Median-gland Nevada springsnail (*Pyrgulopsis pisteri*)
- Fairbanks Spring springsnail (*Pyrgulopsis fairbankensis*)
- Minute tryonia (*Tryonia ericae*)
- Point of Rocks tryonia (*Tryonia elata*)
- Sportinggoods tryonia (*Tryonia angulata*)
- Amargosa tryonia (*Tryonia variegata*)
- *Pyrgulopsis licina*
- *Pyrgulopsis sanchezi*
- Death Valley blue eyed grass (*Sisyrinchium funereum*)
- Ash Meadows ladies-tresses (*Spiranthes infernalis*)

Many of these organisms are also protected under state law. Ash Meadows speckled dace, Devils Hole pupfish, and Warm Springs pupfish are listed as endangered by the State of Nevada (NAC 503.065(2)(b) & (h)); Ash Meadows Amargosa pupfish are listed as threatened (NAC 503.065(3)(c)). All seven of the federally listed plant species are also on the state's list of "fully protected species of native flora," defined as those "critically endangered and threatened with extinction," (NAC 527.010).

The Refuge has seven springs which historically have discharged at rates greater than 500 gallons per minute (1.1. cubic feet per second). There are an additional 25-50 springs discharging less than 500 gallons per minute. Any one of these springs would be a resource of great hydrologic and biological significance – taken together they form one of the most significant areas of surface water in the Mojave Desert. Combined, these springs discharge about 17,000 acre-feet per year of surface water. Currently, FWS holds state appropriative water rights for 17,024 acre-feet per year. These water rights were mostly transferred to the Service as a part of the Nature Conservancy acquisition. With seniority dating back as far as 1886, these rights long pre-date the establishment of the Refuge.

Fairbanks Spring is a spring on the northernmost portion of the Refuge, which contributes substantial surface flow to the overall Ash Meadows flow system. FWS holds four certificated state appropriative water rights for the total flow from Fairbanks Spring:

<u>Permit No.</u>	<u>Priority Date</u>	<u>Duty-Balance</u>	<u>Diversion Balance</u>
53607	07-03-1915	659.6 acre-feet/annum	0.911 cubic feet/second
53609	03-08-1961	1647 acre-feet/annum	2.276 cubic feet/second
53610	04-27-1914	456 acre-feet/annum	0.63 cubic feet/second
53611	10-08-1923	140 acre-feet/annum	0.33 cubic feet/second

These four permits total 2,902.6 acre-feet per year, with a total flow of 4.147 cubic feet per second. All four permits are allocated by the state for wildlife use, which means, “the watering of wildlife and the establishment and maintenance of wetlands, fisheries and other wildlife habitats.” NRS 533.023.

Fairbanks Spring is home to two listed fishes, the Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace. It has also been the site of intensive habitat restoration efforts by the Service, to restore and enhance the populations of these rare endemic species.

While ultimately the source of much of the groundwater discharging at springs in Ash Meadows is the deep carbonate aquifers which underlay it, there is communication between the deep carbonate and shallower basin-fill aquifers in the region of Fairbanks Spring and northern Ash Meadows. Basin fill rock contacts deeper carbonate rock along the so-called Gravity Fault, just a short distance from Fairbanks Spring. *See* Halford, K.J. & Jackson, T.R. 2020, U.S.G.S. Professional Paper 1863, pp. 17, 129. Additionally, the area of the Amargosa Desert north of Ash Meadows has been characterized as having “shallow carbonate rocks.” *See Id.*, p. 140. The exact stratigraphy and hydrogeology of Fairbank Spring has not been characterized at this time, but it’s clear that it is a heterogenous and deeply interconnected hydrogeologic system which gives it rise.

Rover Metals, Inc.’s Notice

Rover Metals, Inc. proposes to drill up to 30 boreholes in close proximity to the Refuge and less than half a mile from Fairbanks Spring. According to the notice, all drill holes are expected to encounter groundwater. The notice does not specify whether Rover anticipates hitting a shallow basin-fill or potentially shallow carbonate rocks. While the exact hydrogeology of the Project and its repercussions on springs in the Refuge are not known at this time, the proposed operations here will potentially, and per Rover’s own notice, intersect the groundwater aquifer that supplies spring flows to Fairbanks Spring and other springs within the Refuge.

Although the proposed operations do not entail an increase in consumptive use of groundwater, Refuge springs and the protected species they harbor may still be subject to significant impacts from any exploration drilling that intersects the groundwater aquifer. Past mineral exploration operations in the Amargosa Basin have induced significant changes in groundwater and surface water flow, even though they did not seek to extract groundwater. For instance, in 1967 an exploratory drill hole near Tecopa, California encountered pressurized groundwater at a depth of 360 feet, creating an artesian spring that continues to flow today. Several attempts to plug the well failed, and the new artesian flow diverted water from several naturally occurring springs, substantially reducing discharge at those springs. The site is now known as Borehole (or Bore Hole) Spring. If something similar were to happen during the exploration operation proposed here,

the result would be catastrophic for the threatened and endangered species that depend on Ash Meadows spring flows.

To the Center's knowledge, neither Rover nor BLM have consulted with FWS regarding the proposed exploration project or obtained a valid ITS.

ESA Violation: Failure to Consult

BLM has authorized "notice" mining exploration activities by Rover which may affect threatened and endangered species without first consulting with FWS as required under ESA Section 7(a)(2). BLM has therefore failed to ensure that agency-authorized mineral exploration on public lands will not cause jeopardy to threatened and endangered species or adversely modify the designated critical habitat for these species. Consultation is required here because even "notice-level" mining activities constitute "agency action" under the ESA.

Section 7 of the ESA defines "agency action" as "any action authorized, funded, or carried out by [a federal] agency." 16 U.S.C. § 1536(a)(2). There is "little doubt" that Congress intended agency action to have a broad definition in the ESA. *Pac. Rivers Council v. Thomas*, 30 F.3d 1050, 1054-55 (9th Cir. 1994) (citing *Tenn. Valley Auth.*, 437 U.S. at 173); *see also W. Watersheds Project v. Matejko*, 468 F.3d 1099, 1108 (9th Cir. 2006). Accordingly, the Ninth Circuit has confirmed that authorization of notice-level mining operations constitutes discretionary "agency action" within the meaning of the ESA, and requires Section 7 consultation. *Karuk Tribe*, 681 F.3d at 1026.

As in *Karuk Tribe*, consultation is required here because BLM's approval of the Project is a discretionary action which may influence mining operations to protect ESA-listed species. *See id.* at 1025-26. Specifically, BLM's mining regulations confer authority on the agency to determine whether any proposed mining activity properly qualifies as notice-level or must instead proceed under a plan of operations. 43 C.F.R. § 3809.313. *See also LKA International, Inc.*, 175 IBLA 225, 230 (2008) ("LKA recognizes that BLM can, under 43 C.F.R. §§ 3809.312(a) and 3809.313, lawfully prohibit LKA from proceeding with the tunnel project under the [notice], if it properly determines, as a matter of law, that the proposed operation does not qualify as a notice-level operation under 43 C.F.R. § 3809.11 or § 3809.21."). BLM is specifically directed to prohibit notice-level mining operations in "special status areas," including lands and waters containing endangered and threatened species. 43 C.F.R. § 3809.11.

In addition, BLM is required by section 302(b) of the Federal Land Policy and Management Act of 1976 ("FLPMA"), 43 U.S.C. § 1732(b) (2000), and 43 C.F.R. Subpart 3809 to ensure that no proposed activity under the mining laws results in unnecessary or undue degradation of the public lands. *Mineral Policy Center v. Norton*, 292 F. Supp.2d 30, 33, 41-46 (D.D.C. 2003). When unnecessary or undue degradation is likely to occur, BLM is required to take appropriate steps to

preclude such degradation, including requiring a notice-level operator, pursuant to 43 C.F.R. §§ 3809.312(a) and 3809.313, to modify its proposed operations in such a manner as “to prevent unnecessary or undue degradation,” or barring an operator, pursuant to 43 C.F.R. § 3809.311(c), from conducting operations where it is unable “to prevent unnecessary or undue degradation.” *See also LKA International, Inc.*, 175 IBLA at 234-35.

Because the mining regulations confer substantial discretion on BLM regarding the administration of notice-level mining activities, and bar certain operations from proceeding under a notice, the Project is subject to ESA consultation as a “discretionary” agency action. *Karuk Tribe*, 681 F.3d at 1026.

An agency has a duty to consult under Section 7 of the ESA for any discretionary agency action that “may affect” a listed species or designated critical habitat. *Turtle Island Restoration Network v. Nat’l Marine Fisheries Serv.*, 340 F.3d 969, 974 (9th Cir. 2003) (citing 50 C.F.R. § 402.14(a)). BLM may avoid the consultation requirement only if it properly and lawfully determines that its action will have “no effect” on a listed species or critical habitat. *Sw. Ctr. for Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1447-48 (9th Cir. 1996).

As discussed above, the proposed drilling operations will directly affect a key component of several listed species’ habitat, and thus “may affect” those species. BLM must therefore consult with FWS to ensure the Project will not jeopardize these species’ continued existence. BLM may not authorize any operations that would constitute a “irreversible and irretrievable commitment of resources until such consultation is complete. *See* 16 U.S.C. § 1536(d).

ESA Violation: Take of Endangered Fish Species

Without a valid ITS—which, as noted, is only available if BLM completes Section 7 consultation—BLM and Rover will both be liable for unlawful “take” under Section 9 of the ESA if the proposed exploration activities harm listed fish species. The regulatory definition of “take” includes “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, and sheltering.” 50 C.F.R. § 17.3. As explained above, Rover’s proposed drilling here will likely intersect the groundwater aquifer, potentially altering or decreasing springflows that the Ash Meadows Amargosa pupfish and the Ash Meadows speckled dace rely on for survival. Consequently, the proposed exploration project poses an imminent substantial risk of injury to these two endangered fish species which, in the absence of a valid ITS, would constitute unlawful “take” under the ESA. *See Forest Conservation Council v. Rosboro Lumber Co.*, 50 F.3d 781 (9th Cir. 1995) (holding that the intent of the “take” prohibition is to “stop imminent threats of injury to protected wildlife” and sustaining “take” claim based on an imminent threat of injury to listed species).

Conclusion

If BLM and Rover do not act within 60 days to correct these violations of the ESA, the Center will pursue litigation in federal court against the agencies, officials, and entities named in this letter. We will seek injunctive and declaratory relief, and legal fees and costs regarding these violations. However, it is our practice to pursue negotiations whenever possible. In keeping with this policy, we invite the agencies to discuss their obligations under the ESA with us. If you have any questions, wish to meet to discuss this matter, or feel this notice is in error, please contact me at any time.

Sincerely,

/s/ Scott Lake

Scott Lake

Nevada Staff Attorney

Center for Biological Diversity

PO Box 6205

Reno, NV 89513-6205

(802) 299-7495

slake@biologicaldiversity.org

Attachment 4 to the Declaration of Patrick Donnelly
Email Exchange with Nicholas B. Pay, BLM (June 30, 2023)

Scott Lake

From: Pay, Nicholas B <npay@blm.gov>
Sent: Friday, June 30, 2023 11:05 AM
To: Patrick Donnelly
Cc: Scott Lake
Subject: Re: [EXTERNAL] Status of Rover Metals

Patrick,

Thanks for your inquiry and your voicemail on Wednesday. I have been in Reno in meetings all week and so I am just catching up.

Rover Metals is actively working with the Nevada State Office to get their Financial Guarantee in place in accordance with the regulations found in 43 CFR 3809. Once that financial guarantee has been adjudicated by the team at the State Office they will send out an acceptance letter to the operator. Once the financial guarantee has been accepted then the operator is able to carry out the work identified in their notice consistent with the Mining Law of 1872 (30 U.S.C. 22 et seq.) and the implementing regulations found in 43 CFR 3809.

Nicholas B. Pay

Field Manager
npay@blm.gov
(702) 515-5042 (Desk)
(702) 250-0864 (Cell)

Pahrump Field Office, Southern Nevada District
Bureau of Land Management
Region 10 (California-Great Basin), Department of the Interior
4701 N Torrey Pines Drive
Las Vegas, NV 89130

*Learn from the Past,
Prepare for the Future,
BE Present, and
Find JOY in Life.*

From: Patrick Donnelly <PDonnelly@biologicaldiversity.org>
Sent: Friday, June 30, 2023 8:28 AM
To: Pay, Nicholas B <npay@blm.gov>
Cc: Scott Lake <slake@biologicaldiversity.org>
Subject: [EXTERNAL] Status of Rover Metals

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello Mr. Pay,

We would like an update on the status of the Rover Metals project please.

Thank you,

-Patrick Donnelly

Patrick Donnelly

Great Basin director

Center for Biological Diversity

775.990.9332

pdonnelly@biologicaldiversity.org

Attachment 5 to the Declaration of Patrick Donnelly
Email Exchange with Mason Voehl, Kevin Emmerich (July 3,
2023)

Scott Lake

From: Patrick Donnelly
Sent: Monday, July 3, 2023 12:17 PM
To: Scott Lake
Subject: FW: [EXTERNAL] Rover Metals Lithium Exploration Project next to Ash Meadows

Patrick Donnelly
Great Basin Director
Center for Biological Diversity
775.990.9332
pdonnelly@biologicaldiversity.org
linktr.ee/bitterwaterblue

From: K. Emmerich <atomicquailranch@gmail.com>
Sent: Thursday, May 18, 2023 11:01 AM
To: Mason Voehl <mason@amargosaconservancy.org>; Laura Cunningham <lcunningham@westernwatersheds.org>; Patrick Donnelly <PDonnelly@biologicaldiversity.org>
Subject: Fwd: [EXTERNAL] Rover Metals Lithium Exploration Project next to Ash Meadows

Hi Mason,

As you can see from the email below, FWS does not even know about this lithium exploration project.

Kevin

----- Forwarded message -----

From: Knowles, Glen W <glen_knowles@fws.gov>
Date: Thu, May 18, 2023 at 10:56 AM
Subject: Re: [EXTERNAL] Rover Metals Lithium Exploration Project next to Ash Meadows
To: K. Emmerich <atomicquailranch@gmail.com>, Pay, Nicholas B <npay@blm.gov>

Hi Kevin,

Thanks for reaching out on this. We have not been contacted or consulted with about anything like the project you describe.

Glen

Glen W. Knowles (he/him)
Field Supervisor
U.S. Fish and Wildlife Service
Southern Nevada Fish and Wildlife Office
4701 North Torrey Pines Drive, Las Vegas, NV 89130
702-515-5244

From: K. Emmerich <atomicquailranch@gmail.com>
Sent: Thursday, May 18, 2023 10:48 AM
To: Knowles, Glen W <glen_knowles@fws.gov>; Pay, Nicholas B <npay@blm.gov>
Subject: [EXTERNAL] Rover Metals Lithium Exploration Project next to Ash Meadows

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi Glenn,

Has the Fish and Wildlife Service done any consultation for Endangered Ash Meadows species for this project?

I would think that drilling 300 foot boreholes so close to Fairbanks Spring in Ash Meadows could create some potential hydrology issues that may impact species near Devil's Hole and Devil's Hole pupfish.

Can you tell me, is this going forward and has FWS reviewed the proposal?

Thanks,

Kevin Emmerich
775-764-1080



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Royal Gorge Field Office
3028 East Main Street
Cañon City, Colorado 81212



DATE FILED: 1/5/2023

**Please indicate any fields you feel are confidential information.*

Fields highlighted in yellow are not likely to be applicable to a small miner (dredge/highbank).

Section 1: Operator/Claimant Information
Pursuant to 43 CFR 3809.301(b)(1).

1. Operator Information

Operator Name: Rover Metals (USA) Inc./O Mathew Smillie
Mailing Address: 8175 S. Virginia St. #850, PMB 393
City: State: ZipCode: Reno, NV, 89511
Phone #: (+1) 778-754-2855 Alternate Phone #: _____
Operator Tax Payer Identification Number: 32-0609787

Attachment 6 to the Declaration of Patrick Donnelly

Email Forwarded from Kevin DesRoberts, FWS (June 28, 2023)

Re: Threats to Ash Meadows NWR

DesRoberts, Kevin J

Wed 6/28/2023 1:58 PM

To: Moore-O'leary, Kara A <kara_moore-oleary@fws.gov>

Cc: Esralew, Rachel <Rachel_Esralew@fws.gov>

Hi Kara,

Unfortunately, this is only one of the many threats to Ash Meadows and the Amargosa Desert region. Ash Meadows is being threatened on all fronts. In addition to the exploratory drilling for lithium, there are numerous solar projects proposed within the watersheds that are vital to ecosystem function in Ash Meadows, especially the Carson Slough. There is also wind energy testing planned northeast of Ash Meadows along Highway 95. Development and expansion of mining in Beatty is also being planned.

Adding to the challenges is the loss of capacity. Mike Bower will be leaving the manager position in the near future and Michael Reeves is leaving for a position with NPS at the end of July. Any delay in backfilling these positions will further jeopardize the future of the Refuge and recovery efforts for T&E species.

FWS is working closely with NPS and NGOs to address potential threats to groundwater.

ES staff and I have provided comments to BLM regarding the proposed solar projects.

NGOs are tracking these threats very closely and taking actions to protect Ash Meadows/Devils Hole/Amargosa Desert.

We'll need assistance on the Refuge. Kara, are you interested in a detail to Ash Meadows?

Thanks.

Kevin

Kevin J. DesRoberts (he/him/his)
Project Leader
Pacific Southwest Region 8
Desert National Wildlife Refuge Complex
4701 N. Torrey Pines DR
Las Vegas, NV 89130
702-515-5451
702-375-4005 (cell)
Kevin_DesRoberts@fws.gov



From: Moore-O'leary, Kara A <kara_moore-oleary@fws.gov>

Sent: Wednesday, June 28, 2023 1:22 PM

To: DesRoberts, Kevin J <kevin_desroberts@fws.gov>

Cc: Esralew, Rachel <Rachel_Esralew@fws.gov>

Subject: Re: Threats to Ash Meadows NWR

This is terrible news. How else can I help? Is the Service taking any action on this?

From: DesRoberts, Kevin J <kevin_desroberts@fws.gov>

Sent: Thursday, June 15, 2023 8:59 AM

To: McCasland, Curtis <curtis_mccasland@fws.gov>; Brady, Stephanie <stephanie_brady@fws.gov>; Anderson, Tom W <tom_w_anderson@fws.gov>

Cc: Keller, Kaylene <Kaylene_Keller@fws.gov>; Moore-O'leary, Kara A <kara_moore-oleary@fws.gov>

Subject: Threats to Ash Meadows NWR

FYI,

<https://www.amargosaconservancy.org/saveashmeadows/>



ACTION ALERT: Save Ash Meadows from Exploratory Drilling - Amargosa Conservancy

Ash Meadows, one of the most critical and vibrant biodiversity hotspots in the United States, is under threat. We need your help to save it.

www.amargosaconservancy.org

Kevin

Kevin J. DesRoberts (he/him/his)
Project Leader
Pacific Southwest Region 8
Desert National Wildlife Refuge Complex
4701 N. Torrey Pines DR
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